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ABSTRACT

For use in planning high school vocational education programs, a study examined the success of Georgia vocational cluster programs in finding jobs, the adequacy of program training, and student attitudes towards the cluster approach. (The cluster concept involves broadly defined instructional programs around families of occupations.) The study limited itself to a noncomparative, purely descriptive approach toward students completing one or two years of study between 1970 and 1976 in one of five clusters: electromechanics, metal fabrication, construction, transportation, and health occupations. The majority of respondents (including graduates, employers, current students, teachers, and staff) considered the program a success. Recommendations include the following: (1) greater examination of enrollment trends in relation to job market needs; (2) continued recruitment of female students and concentration on job rather than in-field placement; (3) continuation of the cluster format; (4) standardized job market survey models; (5) studying differences between one- and two-year students; (6) standardized job placement models and procedures; (7) further analysis of single- versus multi-cluster students; (8) analysis of student motivations; and (9) dissemination of program response and study results. (Survey respondent comments, project schedules and control charts, a cluster program graduate census, sampling distribution, and current student survey are appended.) (MN)

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Final Report
For a Study of
The Cluster Approach To
Secondary Vocational Education
In Georgia

by

C. Paul Scott
And
Charles C. Connor
Principal Investigators

Pursuant To a Grant

To

The Division of Vocational Education
College of Education
The University of Georgia

George L. O'Kelley, Jr., Chairman

From

The Division of Program Improvement
Office of Vocational Education
Georgia Department of Education
Atlanta, Georgia 30334

Charles McDaniel
State Superintendent of Schools

June 1980

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C. Paul Scott
Charles C. Connor

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SECTION I

A STUDY
OF THE CLUSTER APPROACH TO SECONDARY VOCATIONAL EDUCATION IN GEORGIA

A number of converging events occurred in the sixties and early seventies that accelerated the growth of secondary vocational education in Georgia. The consolidation of schools, the comprehensive high school movement, the dropout problem, and the availability of federal funds that could be used to expand vocational education at the secondary level all contributed to the creation and growth of vocational education in Georgia high schools. Specifically, in the last 12 years a network of 125 comprehensive high schools has been developed in the State of Georgia. Additional projections call for a total of 250 such schools to be operational by 1985 (Georgia State Plan for Vocational Education). Each of these schools will feature curricula offerings in both vocational and academic subjects with open access to all students.

After consideration and planning (Master Plan for Vocational Education in Georgia, 1967) involving available experts in the field and leading vocational educators in Georgia, a decision was made to utilize a developmental curriculum for the vocational aspects of the comprehensive program. The curriculum is described in detail by Bottoms and O'Kelley in the March, 1971 issue of the American Vocational Journal. Briefly, the curriculum begins in the elementary school with career and vocational awareness, includes exploratory programs in the middle school, prevocational programs in the early grades of high school and preparatory programs in the upper high school grades with the option for further in-depth specialized job preparation at the post secondary level. This concept of curriculum is STUDENT CENTERED and provides a meaningful approach for students to determine career choice and to receive entry level job training.

Available documents indicate that concern for the age and nature of the secondary school population and the general nature of the Georgia economy promoted interest in a multioccupational approach to vocational education in the high schools. A review of the available theories of career development supported the notion that secondary level students are thinking about careers and moving progressively toward an initial career decision; however, at this point in their lives available research indicates that they still need to keep as many alternatives as possible. Premature foreclosure on future options was of utmost concern to those who worked with youngsters in this age bracket. Everything possible must be done to keep their options open until they have had the opportunity to find their own place in the working world (Frantz and Word, 1971).

The need for flexibility in vocational preparation was also important in terms of the state economy. The Georgia economy was (and perhaps will remain) in a state of transition--moving from a predominantly agrarian economy to one with a mix of agriculture and industry. Such a transitional economy will require greater flexibility in its workforce than an established or static economy. Flexibility in preparing for work then was necessary both in terms of those obtaining the skills and those who would employ them. The cluster approach,, which has the potential to increase student flexibility in the short term and mobility in the long term, was the only logical choice that could have been made at that time.

Purpose of the Study

During the formative stages when the secondary vocational education programs were being developed for use in the comprehensive high schools, there was little concern or time to study the overall impact of secondary vocational education or the cluster concept. The attention of staff at every level was instead directed toward building buildings, acquiring equipment, employing and training teachers and preparing curriculum materials. However, the need for this review and evaluation did not go unnoticed. In January 1978, the Governor's Task Force on Education urged the careful and purposeful review of the cluster concept as a delivery vehicle for secondary vocational education. In their Phase II Report, the task force members provide a specific rationale for such a study.

> Effective program development rests with continual feedback about the extent to which program expectations are being met. This kind of feedback allows for constant, systematic program change and provides a basis for allocating resources in a manner that will most effectively and efficiently serve the vocational needs of Georgia students. As implemented in Georgia, the vocational cluster concept is clearly at a stage where program intent and effectiveness need in-depth study.

THE PURPOSE OF THIS STUDY THEN IS TO DETERMINE THE EFFECTIVENESS OF THE CLUSTER APPROACH AS PERCEIVED BY A VARIETY OF POPULATIONS AND AS DEMONSTRATED IN THE LABOR MARKET AND ADVANCED EDUCATION SETTINGS.

Enroute to accomplishing this purpose the study was designed to provide answers to three questions.

1. Have graduates of the vocational cluster programs obtained jobs within the field or related fields for which they were trained?
2. Are graduates of vocational cluster programs adequately prepared to enter their fields of employment?
3. (a) What are the students' attitudes toward the training they have received? and (b) What degree of job flexibility does the cluster program provide?

The answers to these questions would be derived from the responses of randomly selected samples of the following specified populations: graduates who completed one or two-year cluster programs between 1970 and 1976, the employers of these graduates, students currently enrolled in cluster programs, parents of these current students, vocational administrators, state vocational staff, vocational instructors, and the lay public. A variety of research techniques (described in detail in Section III) would be used to obtain data from these populations.

Limitations of the Study

The major limitation to any follow up study of this nature is the capacity to find the selected sample of subjects and to obtain a quality response from them. There is the ever present possibility that time and geographic mobility have dissipated this population of graduates. If this has occurred any remaining subjects can potentially be biased. Relative to this limitation the study will assume that the sample subjects can be found and that there is no bias in their response to the various instruments.

Definitions of Terms

All unique terms contained in this study will be defined within the context in which they occur.

Significance of the Study

Vocational education at the secondary level represents a major investment of public funds. In addition, it has the potential to touch the lives of thousands of young people throughout the state. These two factors alone make this an important study. The results can offer guidance in the future direction and utilization of the cluster concept in particular and secondary vocational education in general.

Remaining Sections

The remaining sections of this report will develop a review of the related literature and research (Section II); describe the methods and procedures used by the study (Section III); present and discuss the findings (Section IV), of the study; and offer conclusions and recommendations based on the findings of the study (Section V).

SECTION II

REVIEW AND SYNTHESIS OF THE RELATED LITERATURE

This section will present a description of the cluster concept, a rationale for its use in secondary vocational education programs, and a discussion of the methodology and results from current studies of vocational education. It will present a brief discussion of the cluster concept in general and an explanation of how it is used to teach occupational skills. As a second objective, this section will illustrate the rationale for using the cluster as a delivery vehicle for secondary vocational education. The final objective will be to review and discuss the findings from current research on the effectiveness of vocational education at the secondary level.

One point of confusion, and to some extent suspicion, of the cluster concept has been the variety of forms it has assumed. The HumRRO study (Taylor, Montague and Michaels, 1972) classified these forms into three major types of clusters: descriptive, sociological-psychological, and the task-analytic. The descriptive approach to clustering is used primarily to develop career awareness programs. It is not based on a true occupational analysis. The fifteen U. S. Office of Education clusters represent the descriptive approach (i.e., manufacturing). The sociological-psychological clustering method is designed to relate occupations to personal aptitudes and feelings. Sociological-psychological clustering is primarily used to develop career exploratory programs that need a self-occupation interaction. The Georgia PECE program (Program for Education and Career Exploration) is an example of this kind of clustering.

The task analytic cluster type was specifically designed to teach actual job skills. Maley (1975) generically defines the task-analytic as a form of vocational education designed to prepare the individual to enter into gainful employment in a number of related occupations. Based on this description, State Department of Education and University of Georgia staff members prepared the cluster (or multioccupational) programs now used in the comprehensive high schools of Georgia (Frantz and Word, 1971).*

The task-analytic cluster can be structured internally in a variety of ways. Most of the structures, however, contain the common elements of initial exploration of the family of occupations, multioccupational preparation and options for specific preparation in a single occupation during the senior year in high school. This internal structure of the task-analytic cluster is designed to allow for both flexibility and specialization in occupational preparation depending upon the student's state of readiness and personal goals.

Basic Premises of the Task Analytic Cluster Concept

An analysis of the related literature indicates that the task-analytic cluster concept is based primarily on the following premises.

1. That the secondary school population is unique.
2. That some specific occupational exploration must take place before reasonable decisions and long term choices can be made.
3. That both society (represented in this instance by the labor market) and the student require flexibility in occupational skills.
4. That a broader base of skills and occupational preparation enhance student opportunities to participate in any future interpersonal opportunities.
5. That, when appropriate, students have the option to specialize in one occupation or another in any cluster.

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*Frantz and Word developed their cluster design for Georgia comprehensive high schools from Maley's original research reports. These reports were later published as a book in 1975, hence the difference in the dates reported here.

6. That most students will participlate in further training after completing their studies in a cluster.

7. That the cluster provides a skill base that will enable these program completers to maintain continuous employment.

8. That the development of a given cluster is determined by an analysis of content common to a number of related occupations.

9. That the task-analytic cluster is not a modified form of industrial arts. The primary purpose of these clusters is to teach job preparation.

10. That such broad based occupational preparation allows geographic alternatives in finding work, and enhances overall career mobility.

Why use the cluster concept to teach occupational skills at the secondary school level? Its proponents say the answer to this question can be found in the very nature of American society. American society is both dynamic and democratic. Within this context there are a number of interacting forces that create a need for flexibility and adaptability in preparation for participation in the work force. Some of the more obvious forces acting on secondary level vocational education are economics, the nature of work, new developments in education and geographic and social mobility. Each of these forces has impact when acting alone; however, it is because of their interaction with each other that vocational education is pushed to consider special program designs.

The following brief descriptions of each of the interacting forces illustrate the argument for flexibility in the programs designed for secondary vocational education programs. Unless otherwise stated, Maley's work served as the basis for developing each of these statements.

Economics

Vocational educators have no control over the economic environment in which they work. Yet it is encumbent upon them to provide their students with every opportunity to participate fully in the American economic system. In simple terms this means having the flexibility and the capacity to maintain a job within the framework of a fluctuating economic system.

Nature of Work

The nature of work is constantly changing. One technological advancement after another is either making obsolete the way workers perform present tasks, thereby creating new ways for doing existing work, or in many instances eliminating existing routines altogether and replacing them with totally new jobs. Brown and Feit (1971) summed up this axiom a long time ago when they wrote that 70% of the jobs youngsters in today's elementary schools will hold do not now exist. Even if the influence of technology is totally ignored, vocational educators must accept the position that work generally is organized around a hierarchy of experience, therefore limiting the scope of activities in which the newly entering worker can participate. When this factor is coupled with the general availability of jobs in a particular community, it can serve to further support the cluster approach to occupational preparation.

New Developments in Education

Along with its impact on other aspects of society, technology has also created new horizons for education. It has provided hardware (i.e., sound/slide projectors and their many relatives) and software, such as systems engineering concepts, that are used to create curricula and instructional materials. No other aspect of the educational enterprise has adopted these technological vehicles of teaching and learning with more vigor than vocational education. The result of this utilization of technology has been the improvement of the capacity to diversify classroom and shop activities. This diversification of learning activities makes it unnecessary to require all students to work on the same task at the same time or to all pursue the same single skill occupational objective.

Geographic and Social Mobility

Personal mobility has become the companion to the many and constant changes taking place in the American society. As the nature of work is changing, the workers are also changing. Current evidence indicates that people change geographic locations both as a result of a job or the effort to obtain one. In addition to geographical changes and simple job changes, the American worker is changing careers several times during the productive life span. If adult workers are this mobile, it is highly likely that their youngsters will follow a similar pattern. If so, they will need vocational training that will provide maximum adaptability and flexibility.

All of these preceding elements merge into societal change. If there is one trademark of American society, it is change. The cluster approach was designed to provide flexibility, adaptability and a broad base of worker skills for the young person about to enter the work force. It is also based on the perceived need in today's highly mobile society to provide individuals with a greater degree of job mobility. Broad based occupational preparation is seen as the means for allowing program completers more geographic alternatives in finding work. It is also intended to give the student a form of horizontal, and in many cases vertical, versatility for positions within an industry or an occupational field. An underlying assumption is that the less rigid the vocational education program, the more flexibility its students have to develop and pursue their careers (Frantz, 1972).

Review and Synthesis of Research

This part of Section II will present and discuss recent research relative to vocational education in public secondary schools. Data relative to both the traditional and cluster approach to teaching vocational education will be discussed. The findings of various studies concerning placement, program effectiveness and methodology will be reviewed relative to their potential impact on this study. The relationship between the findings of these studies and the cluster study will be presented in Section V.

Two national studies, the National Longitudinal Study of the High School Class of 1972 and Project Baseline, have supplied quantities of data and information relative to the effects of secondary vocational education programs.

The National Longitudinal Study, which is composed of several phases involving follow-up studies extending over six to eight years, began in the Spring of 1972. It was conducted by Educational Testing Service (ETS) under contract to the National Center for Educational Statistics (NCES). The original sample consisted of almost 18,000 high school seniors. By the time the second follow-up was conducted in 1974, the sample had been increased to 20,872 students.

This longitudinal study included the completion of a questionnaire by the study participants in October 1974. The questionnaire provided information on educational experiences and occupational attainments. This first follow-up data could then be used with prior achievement test scores and other related data to create the first profile of the "Class of 72".

One of the objectives of Project Baseline, a study of vocational education conducted from 1970 to 1975 by Arthur M. Lee, was an attempt to identify the job placement status of vocational school graduates. Lee relied almost entirely on teacher reported placement information supplied by the participating states. Placement percentages from 1970 to 1975 were graphically displayed. These data indicated that during the five year period studied, an average of 90% of the participating students completed their program of study and, of these, 50% obtained jobs in the field for which they trained.

When questions were raised about the validity of these data, Lee offered the following statement of verification.

> "These Figures seem unrealistic to some observers and questions may be raised about the validity of the data. The Baseline staff was skeptical at first, and admittedly the sources are often biased and unreliable. Most states collect their follow-up data from teachers, and teachers are suspected of guessing when they don't know and guessing on the side of successful teaching. However, when States have shifted from teacher-supplied data to direct student follow-up systems, or have changed back, the percentages have not changed a great deal. A few states have made validation studies and their teacher-supplied figures have shown to be fairly reliable. The State of Kansas by law must have the student follow-up audited by another agency, and Kansas' employment percentages are higher, not lower, than those of the nation as a whole. These observations would seem to indicate that any inflationary effect of personal reporting by teachers is reasonably small. It may be balanced

> by the number of students whose employment status is reported as unknown when in fact they are employed. (Lee, 1976, pp. 42-43).

Lee's reports are still questionable when viewed in terms of studies conducted by Conroy (1979) and his analysis of data pertaining to the placement of vocational graduates from a variety of research projects. In a 1976 follow-up study of graduates from Massachusetts high schools, Conroy found that 27% of the vocational education students had obtained placement in the field for which they were trained. He also cites a study by Gerald Somers that found a 25% in-field of training placement rate. Unlike Lee's Project Baseline, data for both of these studies came directly from students.

The methods and procedures used to obtain data for Project Baseline are typical of many studies of vocational education. A recent study conducted by the Texas State Advisory Council on Vocational Education illustrates this point. The Texas researchers used a teacher reporting system. Theirs differed from Project Baseline only in that Project Baseline acquired the teacher data as it had been accumulated by the several states while the Texas researchers went directly to the teachers. The study required that the teachers initiate a follow-up of their program completers each January. They reported that 62.3% of school year 76-77 program completers had obtained employment in their field of training or in a closely related field. Again, the teacher-reported in-field placement data in this study exceeds student reported data for the same item in other states (Texas Advisory Council on Vocational Education, 1978).

As reported earlier in this section, much has been written about the advantages of the cluster concept, but only a limited amount of research has been completed relative to the placement of cluster completers in jobs related to their training. For example Maley's (1975) own research in Talbot County, Maryland does not provide conclusive placement information. The study, conducted in 1969, reported that 26% of the completers continued their education in a four year college, an additional 5% continued in a two year institution and 69% entered the labor market. However, the study does not reveal any details regarding the 69% who went into the labor market. Conroy provides some insight by comparing his own studies of placements from traditional programs to the cluster studies of Somers. In this comparison Conroy reported the in-field or related field of cluster completers to be slightly better than that of completers of traditional single skill programs (Conroy, 1979).

Most studies of the cluster concept have focused on population mobility--both geographic and occupational. Venn (1969) made the observation that most young people today will have to change occupations four or five times during their lives. Therefore, a long range policy of teaching simple, specific skills may actually be debilitating to the students in the long view. Today's workers should be trained for clusters of jobs so that they may switch from one job to another as technology advances or economic flux causes changes in worker needs. Venn's observations are supported by Somers (1971) who noted that as young workers gained experience they tended to shift from the field for which they were trained to other occupations. He concluded that the cluster approach provided the most realistic opportunity for secondary vocational education students in today's economic environment.

The cluster concept project (Maley, 1969) conducted at the University of Maryland found that most students appreciated the need for entry-level training which would enable them to enter different occupations as opposed to specialized training in a specific trade. The project also found that a significant number of students were aware of the first job's significance and the concept of career development as a lifelong process.

In review of the research conducted for placement of high school graduates who are working in an area for which they are trained, two methods of data collection must be considered. Teacher supplied data and student direct response. Placement data reported by teachers always averages above the 50 percentile while direct student supplied data remains below the 50 percentile of occupationally placed high school graduates.

Only a limited number of studies have been conducted relative to the in-field job placement of completers of cluster programs. Most of the studies that have been done support the concept on the basis of mobility. However, in the generic sense of vocational education, much of the data collected in other studies, particularly those that are national in scope, have implications for the cluster concept. The remainder of this summary will discuss the analysis of the more prominent national studies from three different points of view.

Grasso and Shea (1979) have evaluated four major national longitudinal surveys of American Youth: Project TALENT, Youth in Transition, The National Longitudinal Study of Labor Market Experience, and The National Longitudinal Study of the High School Class of 1972. (It must be noted here that these were not surveys of cluster programs but of secondary vocational education programs in general.) These studies have some difficulties due to incomplete data which prevent an in-depth analysis that can be supported as well as Conroy's (1979) review, however they do offer some valuable insights.

1. In terms of traditional female occupations those young women completing vocational education programs were much more successful (on all criteria) in the labor market than their peers who completed the general curriculum. (The reader should remember that these data were collected prior to the effort to get women into "non-traditional" jobs. If vocational education provided them an advantage in the traditional jobs its potential to aid with non-traditional should be extremely good.)
2. There was a tendency for males in traditional vocational programs to have a more narrow awareness of occupations in general than the students not in vocational education programs. (This need to broaden occupational awareness has implications for the cluster concept.)
3. One interesting finding from the Grasso and Shea analysis was that even though the sample subjects used tended to dislike school in general, they had very good feelings about vocational education and the vocational courses they had taken.

After his analysis of The National Longitudinal Study of the Class of 1972, Project TALENT and his own survey of vocational program completers in Massachusetts, Conroy (1979) concluded that the accountability basis for vocational education was incorrect. His analysis revealed that the actual in-field placement of vocational education program completers averages 30%; however, his analysis of salary differentials illustrated a systematic relationship between vocational education and increased earnings. Conroy's original Massachusetts study indicated that high school graduates who took vocational education courses had an annual advantage in earnings over non-vocational graduates of $1380. This data was further supported by findings of The National Longitudinal Study of the Class of 1972 although the difference in income was less. Conroy surmised that in-field placement was an insignificant criteria, but that an investment in vocational education was an investment in human capital in the aggregate.

Bottoms (1979) also reviewed The National Longitudinal Study of the Class of 1972, Project TALENT, and Vocational Education and Training Impact on Youth. His research revealed that some secondary vocational students are more likely to have specific occupational goals and usually have more individualistic career aspirations than general curriculum students. Vocational education graduates also generally term their education to have been adequate while many general curriculum students indicate dissatisfaction. These studies also indicated that when socioeconomic status and scholastic aptitude are equal, enrollment in vocational education raises the probability that students will complete secondary school. The studies further indicated that students who benefited most from post-secondary vocational education have been previously enrolled in secondary vocational education courses. With respect to drop-outs, the studies found that those who have been enrolled in secondary vocational education are more successful than general curriculum drop-outs.

From this review and synthesis of related literature, a number of factors are apparent. There is much discussion and support for the cluster concept, but only a limited amount of serious research. The research focus is, however, on vocational education as a whole, and the results are generally positive. The indicators are that vocational education is liked and appreciated by its student consumers. There is a strong composite of data that indicate an increased earning capacity for high school graduates with vocational preparation when compared to students who did not take vocational courses. These findings have led some authors to suggest that the current basis for accountability in vocational education (placement in the field for which trained) should be reconsidered and those other factors (i.e., salary differential) used instead.

Periodic follow-up studies and a few organized longitudinal studies seem to be the primary modes of study relative to vocational education. There seems to be a great lack of an organized intent in many studies to identify a comprehensive set of variables and collect data on them. Many questions remain unanswered because of this. The general nature of the vocational student, as far as this review was able to go, is never described. Finally, the source of the data is considerably different when collected from the teacher versus direct collection from the students themselves.

SECTION III

METHODS AND PROCEDURES

This section provides a complete description of all aspects of the methodology used in the cluster study. The methods and procedures used were based directly on the specifications in the approved funded research proposal, except where otherwise noted. In all cases the conduct of the study was guided by the imperative to produce the maximum quality yield within the constraints of the project time schedule and budget, and pursuant to the purposes of the study.

Project Control and Monitoring

In a study of this large magnitude successful completion of the project is dependent not only on the adequacy of the research design and the precision of execution, but also is due in large measure to the level of cooperation that can be maintained with all relevant parties in the field. Both internal and external control and monitoring mechanisms, described below, were established to insure success in each of these three areas.

External Controls and Monitoring.

Two committees were established external to the project staff to perform functions of project monitoring and guidance and to aid in formative evaluation:

> Project Executive Committee. This committee was composed of five teacher educators at the University of Georgia. Three members were from within subject areas in Vocational Education and two were from Educational Research. The membership of this committee was chosen to provide a mixture of expertise in subject fields and expertise in educational research. The committee met periodically with the project staff to review elements of the research design, to evaluate measurement instruments, and to review and evaluate data analysis techniques.

The field experience of some of these committee members in their direct contacts with the secondary vocational programs proved to be very helpful in merging technical study requirements with realities of vocational program operation.

Project Steering Committee. The Steering Committee was composed of the State Director and Division Heads of the Office of Vocational Education, Department of Education, State of Georgia. This committee was responsible for monitoring overall compliance of the project activities with the funded proposal. In fulfilling this function the committee reviewed and approved all major phases of research activities prior to their implementation, and was provided with monthly reports on the progress of the project.

This committee aided in research design and instrument development through the review and approval process, and supplied essential information on secondary vocational program structure and operation. The Steering Committee was also of vital importance in establishing communications between the project staff and program personnel.

Internal Controls and Monitoring.

The project staff developed and instituted a set of management procedures which proved essential to the success of the project. Because the study was really eight different surveys being conducted simultaneously, coordination of manpower and resource use became one of the most important considerations in carrying out the study. This was especially true since several of the survey populations had critical time deadlines by which data collection must take place. To solve these problems of time and resource allocation and activities scheduling, the following tools were developed.

1. Activities Schedule and Gantt Chart. The Gantt Chart visually displays the twenty major activities of the study on a calendar with starting, duration, and ending dates for each activity. (See Appendix B)
2. Individual Survey Gantt Charts. Each of the seven original surveys to be conducted was plotted out on individual Gantt Charts so that the sequence of activities and critical dates could be identified and checked against project progress. (See Appendix B)

3. Project Control Chart. Each of the twelve objectives of the study was broken into its component subobjectives, and each subobjective was analyzed by a task listing and detailing. These objectives, subobjectives and tasks were listed out on a master chart, and responsibility was identified or assigned for each task. (See Appendix B)

By using these management tools, the project staff was able to plan and coordinate the many diverse activities of the study. It was also found to be desirable to have periodic meetings between the full staff and the Project Coordinator to keep everyone alert to project deadlines and manpower schedules and to identify and solve problems as they arose.

Controlling Laboratory Effects

Curriculum innovation is usually a politically, administratively, and emotionally volatile activity, particularly when it involves a significant departure from traditionally held beliefs and practices and when it involves large numbers of staff, students, and institutions, as it does in a statewide curriculum change. It was widely known before the cluster study began that strong opinions existed both in support of the cluster concept and in opposition to it at all levels of the educational structure. It was important to the success of the study that the study itself not introduce a laboratory effect by over-sensitizing study participants to the issues being investigated, or by in any way polarizing existing opinions. For this reason all contacts with study participants were kept issue-neutral. All written communications were analyzed carefully to eliminate any content that might be misinterpreted as being in any way suggestive or biased. An active and conscientious effort was made to keep the conduct of the study straightforward and above-board without any hint of secrecy. The positive functional benefits of program evaluation were stressed at all times, along with reminders of the legal imperatives inherent in program operation. Finally, care was taken that premature conclusions not be stated or implied at any point before or during data collection and analysis.

Selection of the Study Clusters

There were practical and methodological limitations on the number of secondary vocational clusters that could be included in the study. One of the primary goals of the study was to measure the relationship between cluster participation and later experiences of graduates. Toward this goal, the research design specified that the only graduates to be included in the study were those who graduated from high school between 1970 and 1976, inclusive. The clusters selected for inclusion in the study must be those that were in widespread use in the period 1970-1976. The Steering Committee, with the advice of the project staff, selected five vocational clusters that satisfied this criterion:

(1) Electro-Mechanics
(2) Metal Fabrication
(3) Construction
(4) Transportation
(5) Health Occupations

It has been estimated that these five clusters account for more than 80% of all students enrolled in cluster programs during the 1970-1976 period. Most comprehensive high schools offered these clusters during this period; therefore a larger number of schools were eligible for inclusion in the study than would be the case if the less popular clusters were included. Also, these five clusters are the oldest, thereby providing a larger graduate population from which to sample for the early years of the cluster program. If the less popular clusters had been included, collection of data from a representative sample of graduates would have been difficult or impossible.

Identification of Eligible Schools and Selection of Sample Schools

The Steering Committee and the project staff together reviewed the existing secondary cluster programs in Georgia to determine which ones were operational early enough to produce graduates who were eligible for inclusion in the study. The criteria for eligibility were that (1) the school must have an active cluster program in one or more of the five clusters selected for the study, and (2) the cluster program must have been implemented no later than 1974. The 1974 cutoff date was established because the most recent graduates to be included in the study were from the 1976 graduating class, and it was necessary for the program to be in operation at least two years in order to have stability and in order to have both one-year and two-year graduates, as called for by the research design specifications. A total of 58 schools were identified which met these criteria. These included both comprehensive high schools and vocational centers.

Since 58 schools were an impractically large number for all to be included in the study sample, it was necessary to select a representative sample from among the 58. The sampling methodology employed was a stratified cluster method with random selection. Each school represents clusters (subsets) from the total population of graduates, current students, parents, etc. Thus there are 58 clusters of respondents. The schools were stratified according to the following procedure before the random sample was selected.

1. Regional Classification The schools were first separated into the four Office of Vocational Education planning regions.

2. Size of School. The schools within each region were further subdivided by size, using the athletic classification of the schools. Occupational centers were placed in a separate category.

3. Opening Date. The schools within each size category were divided by opening date to ensure that both old established programs and younger programs would be proportionally represented in the final sample.

From this stratified list of schools a one-third sample was drawn from each subcategory, thereby producing a random sample proportionally stratified by geographic region, size of school and opening date of school. The schools from each subcategory were selected for the study sample by the use of a table of random numbers and coin flips for dichotomous choices. After the 20 sample schools were selected, six additional schools were identified for use as field test sites. The stratified list of 58 schools showing the 20 schools selected for the sample and the six field test schools is shown in Figure 3.1. The Steering Committee and the project staff together selected this sample, and then reviewed it to make sure that no random bias had been introduced by the selection process.

It was necessary to make this sample selection with extreme methodological precision because it formed the basis for all future selections of program graduates, current students, parents of current students, employers, and the lay public. The care with which the selection was made ensured statewide proportional representation of these study populations.

Figure 3.1

CLUSTER STUDY UNIVERSE SCHOOLS

SHOWING SAMPLE AND FIELD TEST SCHOOLS*

SAMPLE SIZE	TOTAL # SCHOOLS	SIZE	SCHOOL SYSTEM		SCHOOL	OPENING DATE
REGION: I						
(8)	24		Total for Region I			
(1)	2	AA	Atlanta City		Archer High School, Atlanta	1972
			Haralson Co.	X	Haralson Co. H.S., Tallapoosa	1973
(1)	3	AAA	Calhoun City		Calhoun H.S., Calhoun	1968
			Chattooga Co.		Chattooga H.S., Summerville	1969
			Paulding Co.	X	Paulding Co. Comp. H.S., Dallas	1969
(1)	3		Fannin Co.		Fannin Co. Voc. H.S., Blue Ridge	1970
			Henry Co.	X	Henry Co. H.S., McDonough	1970
			Polk Co.		Cedartown Comp. H.S., Cedartown	1970
(2)	6		Atlanta City		Walter George Voc. H.S., Atlanta	1973
			Catoosa Co.		Lakeview-Ft.Oglethorpe H.S., Ft.Ogleth.	1972
			Murray Co.		Murray Co. H.S., Chatsworth	1974
			Walker Co.	X	Rossville H.S., Rossville	1973
			Walker Co.		LaFayette H.S., LaFayette	1974
			Walton Co.	X	Monroe Comp. H.S., Monroe	1972
(1)	4	AAAA	Atlanta City		Washington H.S., Atlanta	1968
			Cherokee Co.	X	Cherokee H.S., Canton	1968
			Forsyth Co.		Forsyth Co. H.S., Cumming	1969
			Rockdale Co.	F	Rockdale Co. H.S., Conyers	1966
(1)	3		Clayton Co.	X	Forest Park H.S., Forest Park	1972
			Douglas Co.		Douglas Co. H.S., Douglasville	1972
			Newton Co.		Newton Co. H.S., Covington	1974
(1)	3	Voc Cent.	Dekalb Co.	X	Dekalb Occup. Educ. Cen., Dunwoody	1973
			Floyd Co.	F	Coosa Valley Voc. H.S., Rome	1971
			Gwinnett Co.		Gwinnett Co. Voc. H.S., Lawrenceville	1973
REGION: II						
(5)	14		Total for Region II			
(1)	3	AA	Union Co.		Union Co. H.S., Blairsville	1974
			White Co.	X	White Co. Voc. H.S., Cleveland	1972
			Wilkes Co.		Washington-Wilkes Comp. H.S., Washington	1974
(1)	3	AAA	Gainesville City	F	Gainesville H.S., Gainesville	1972
			Madison Co.		Madison Voc. H.S., Danielsville	1972
			Washington Co.	X	Washington Co. Career Cen., Sandersville	1966
(1)	2		Franklin Co.		Franklin Co. H.S., Carnesville	1974
			Hall Co.	X	North Hall H.S., Gainesville	1974
(1)	3	AAAA	Baldwin Co.		Baldwin Area Voc. H.S., Milledgeville	1971
			Habersham Co.		Habersham Central H.S., Cornelia	1970
			Stephens Co.	X	Stephens Co. H.S., Toccoa	1970
(1)	3		Clarke Co.	X	Cedar Shoals H.S., Athens	1972
			Clarke Co.	F	Clarke Central H.S., Athens	1972
			Hall Co.		Johnson Comp. H.S., Gainesville	1974

*X = Sample School
*F = Field Test School

CLUSTER STUDY UNIVERSE SCHOOLS

SHOWING SAMPLE AND FIELD TEST SCHOOLS*

SAMPLE SIZE	TOTAL # SCHOOLS	SIZE	SCHOOL SYSTEM		SCHOOL	OPENING DATE
REGION: III						
(3)	7		Total for Region III			
(1)	3	A	Wheeler Co.		Wheeler Co. H.S., Alamo	1974
		AA	Bacon Co.	X	Bacon Co. H.S., Alma	1974
			Wilcox Co.		Wilcox Co. H.S., Rochelle	1974
(1)	2	AAA	Appling Co.	X	Appling Co. H.S., Baxley	1972
			Camden Co.	F	Camden Co. H.S., St. Marys	1974
(1)	2	AAAA	Liberty Co.	X	Bradwell Institute, Hinesville	1972
			Wayne Co.		Wayne Co. Voc. H.S., Jesup	1966
REGION: IV						
(4)	13		Total for Region IV			
(1)	3	AA	Calhoun Co.		Calhoun Co. H.S., Edison	1974
			Mitchell Co.		Mitchell Co. H.S., Camilla	1974
			Randolph Co.	X	Randolph Comp. H.S., Cuthbert	1974
(1)	3	AAA	Early Co.	X	Early Co. H.S., Blakely	1974
			Grady Co.		Cairo H.S., Cairo	1974
			Peach Co.		Peach Co. H.S., Fort Valley	1974
(1)	4	AAAA	Crisp Co.	X	Crisp Co. H.S., Cordele	1970
			Decatur Co.		Bainbridge H.S., Bainbridge	1974
			Lowndes Co.		Lowndes Co. H.S., Valdosta	1974
			Valdosta City	F	Valdosta H.S., Valdosta	1973
(1)	3	Voc Cen.	Dougherty Co.	X	Albany Voc. H.S., Albany	1972
			Houston Co.		Houston Voc. Center, Warner Robins	1973
			Thomasville City		Thomasville Voc. H.S., Thomasville	1972
(20)	58	TOTAL FOR GEORGIA				

*X = Sample School
*F = Field Test School

Survey of Cluster Graduates

For purposes of this study, graduates are defined as all those students in the sample schools who completed one or more years in at least one of the five clusters designated for this study and who graduated during the years 1970-1976.

Estimating the Graduate Population.

When the study began there were no accurate figures available to indicate how many graduates might qualify for inclusion in the study. In an attempt to estimate the size of the universe population, state records on program completers were culled for all relevant data. These data were acknowledged to be incomplete and to have errors of inclusion and exclusion. No data at all were available for 1970 and 1973, and only partial data were available for 1975. Using the data which were available and extrapolating for the missing categories, it was estimated that the 58 schools eligible for inclusion in the study produced 14,290 completers in the five study clusters during the years 1970-1976. (See Tables 3.2 and 3.3.) It was determined by the research staff that if these estimates proved to be correct, the graduate population would be much too large for total surveying because of the cost and logistics that would be involved. Consultation with standard statistical sampling charts indicated that a random sample of 384 respondents would be adequate to represent the graduate population.

Conducting the Graduate Census.

The first phase of data collection was the conducting of a census of the cluster graduates from the field test schools and the study sample schools. The completion of this census was the direct responsibility of the vocational supervisors in the selected schools. After the field test schools and study sample schools were identified, they were notified of

Table 3.2

CLUSTER PROGRAM GRADUATES STATEWIDE: 1970-1976 (N = 16,918) -- ESTIMATES

	1970	1971	1972	1973	1974	Total	1975	1976	Total
Electro-Mech	(13)	18	36	(444)	696	1207	(790)	884	1674
Transportation	(374)	535	529	(518)	490	2446	721	1804	2525
Construction	(107)	152	181	(316)	390	1146	588	1224	1812
Metal Fab.	(231)	331	398	(572)	707	2239	(904)	1101	2005
Health					324	324	654	886	1540
Total	(725)	1036	1144	(1850)	2607	7362	3657	5899	9556

Source: Georgia State Department of Education. Office of Vocational Education. Reports of Completers. Numbers in parentheses are extrapolated data.

Table 3.3

CLUSTER STUDY UNIVERSE SCHOOLS

PROJECTED GRADUATES BY REGION AND YEAR (N = 14,290)

REGION	1970	1971	1972	1973	1974	Total	1975	1976	Total
I	414	570	647	974	1210	3815	1325	1625	2950
II	52	155	199	438	495	1339	795	975	1770
III	155	155	149	243	275	977	477	585	1062
IV	52	104	99	195	275	725	742	910	1652
						6856			7434

their selection for inclusion in the study by means of a letter from Dr. Joseph Freund, Associate State Superintendent for Vocational Education. Accompanying that letter was a supply of forms and instructions for completing the graduate census. (See Appendix C for copies of the census form and cover letters.) The census forms and cover letters were mailed to the twenty study schools and the six field test schools on April 3, 1979.

The instructions asked that in the field test schools the census be completed for every third eligible graduate from the years 1970, 1973, and 1976. In the twenty sample schools the census was to contain the names of all eligible graduates from the five study clusters for all the years from 1970 through 1976. Detailed logs of the mailing and return of the census, as well as all related telephone calls and follow-up efforts were maintained so that a complete evaluation and accounting could be made.

In response to our request for the graduate census, two of the study schools indicated that they had not had active programs during the years covered by the study in the five clusters under investigation. Because of this response, Brunswick High School in Region III and Valdosta High School in Region IV were removed from the final study sample. Bradwell Institute in Liberty County was selected as the only viable alternate for Brunswick High School. Crisp County High School in Region IV, which was originally a field test school, was switched for Valdosta High School. Both the alternate schools are adequate substitutes in every respect.

It was clear from telephone conversations with the vocational supervisors that in many schools the records of vocational graduates were extremely difficult to identify. This difficulty resulted from the fact that no separate records were maintained for vocational students during the years covered by the study, with the exception that in 1976, the last class of graduates studied, some programs began keeping separate records. It was necessary, therefore, for vocational supervisors to consult the permanent records for all graduates in order to locate the records of graduates with vocational training.

There is no uniform system in operation among the various schools across the state for the organization of permanent records. In some schools the permanent records are kept at the school itself. In some systems all permanent school records are maintained in a central file at the board of education offices. Some files are arranged by year, and some are arranged in a single alphabetic listing without regard to year. Most permanent files do not have a separate index or cross reference. The most difficult records to locate were those filed in a central county or city file arranged alphabetically with no year index. Many vocational supervisors used their school's rosters of graduates for the years covered by the study, and some used old roll books as rough indexes to the permanent records.

In spite of spring breaks, hard to locate records and year-end school activities, the overall response from vocational supervisors was one of excellent cooperation. The census of the cluster graduates that was begun on April 3, and which was originally scheduled for completion on April 20, was successfully concluded on May 25, 1979, with receipt of the graduate census from the last outstanding school. From among all the graduates of the twenty study schools for the years 1970 through 1976, 3459 were identified who had completed one or more years in one of the five vocational clusters included in the study.

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The instructions asked that in the field test schools the census be completed for every third eligible graduate from the years 1970, 1973, and 1976. In the twenty sample schools the census was to contain the names of all eligible graduates from the five study clusters for all the years from 1970 through 1976. Detailed logs of the mailing and return of the census, as well as all related telephone calls and follow-up efforts were maintained so that a complete evaluation and accounting could be made.

In response to our request for the graduate census, two of the study schools indicated that they had not had active programs during the years covered by the study in the five clusters under investigation. Because of this response, Brunswick High School in Region III and Valdosta High School in Region IV were removed from the final study sample. Bradwell Institute in Liberty County was selected as the only viable alternate for Brunswick High School. Crisp County High School in Region IV, which was originally a field test school, was switched for Valdosta High School. Both the alternate schools are adequate substitutes in every respect.

It was clear from telephone conversations with the vocational supervisors that in many schools the records of vocational graduates were extremely difficult to identify. This difficulty resulted from the fact that no separate records were maintained for vocational students during the years covered by the study, with the exception that in 1976, the last class of graduates studied, some programs began keeping separate records. It was necessary, therefore, for vocational supervisors to consult the permanent records for all graduates in order to locate the records of graduates with vocational training.

There is no uniform system in operation among the various schools across the state for the organization of permanent records. In some schools the permanent records are kept at the school itself. In some systems all permanent school records are maintained in a central file at the board of education offices. Some files are arranged by year, and some are arranged in a single alphabetic listing without regard to year. Most permanent files do not have a separate index or cross reference. The most difficult records to locate were those filed in a central county or city file arranged alphabetically with no year index. Many vocational supervisors used their school's rosters of graduates for the years covered by the study, and some used old roll books as rough indexes to the permanent records.

In spite of spring breaks, hard to locate records and year-end school activities, the overall response from vocational supervisors was one of excellent cooperation. The census of the cluster graduates that was begun on April 3, and which was originally scheduled for completion on April 20, was successfully concluded on May 25, 1979, with receipt of the graduate census from the last outstanding school. From among all the graduates of the twenty study schools for the years 1970 through 1976, 3459 were identified who had completed one or more years in one of the five vocational clusters included in the study.

The distribution of these graduates among the five clusters and the four geograhic regions is shown in Table 3.4. The two major divisions in the table group the graduates into two categories by year of graduation, 1970-1974 and 1975-1976. Within the two year-of-graduation categories, summary figures are shown for each of the five clusters in each of the four geographic regions. Corresponding figures for each of the twenty sample schools are provided in Appendix D.

Sampling the Graduate Population

After completion of the graduate census, the next step in preparing to survey the graduate population was to draw a proportional random sample from the twenty sample schools. Even though a sample of 384 would have been statistically adequate to represent all cluster students statewide, an initial sample size of 400 was decided on in order to allow for any rounding problems that might result from proportioning the sample.

The graduate census figures from each school, shown in Appendix C, were used in proportioning the sample of 400 among the schools and clusters by use of the following formula:

$$S_{csy} = (C_{sy}/P_t)S_t$$

where

S_{csy} = the sample size for a given cluster at a given school for a given year category

C_{sy} = the number of graduates in any cluster at a given school in a given year category

P_t = the total population of cluster graduates (3459)

S_t = the total sample size (400)

For example, in order to proportionally represent the graduates from Cherokee High School who graduated during the years 1970-1974 and who were enrolled in more than one cluster, we would use the following values.

C_{sy} = 35 (See Appendix C for Cherokee High School, 1970-1974, "More than one cluster")

P_t = 3459 (Total graduate census)

S_t = 400 (Total sample size)

$S_{csy} = (35/3459)400 = 4.05$

Thus, of the 35 graduates from Cherokee High School during 1970-1976 who participated in more than one cluster, a random sample of four is needed to proportionally represent this category in the total sample of 400.

Table 3.5 shows by region and cluster the proportional distribution of the sample for the two year categories. Rounding during calculation of the individual school samples resulted in an increase in the total sample size from 400 to 418. A detailed summary of the sample for individual schools is contained in Appendix D.

Table 3.4

CLUSTER GRADUATE CENSUS
(N = 3459)

1970-1974

Statewide	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Region I	39	142	161	41	146	24	553
Region II	67	28	61	63	85	109	413
Region III	17	22	18	16	29	58	160
Region IV	12	97	75	74	85	33	376
Total	135	289	315	194	345	224	1502

1975-1976

Statewide	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Region I	59	133	146	155	197	177	867
Region II	22	105	60	85	78	83	433
Region III	47	33	60	41	40	60	281
Region IV	13	97	75	74	85	33	376
Total	141	368	341	355	400	353	1957

Table 3.5

CLUSTER GRADUATE SAMPLE DISTRIBUTION

(N = 418)

1970-1974

Region	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Region I	5	16	19	5	17	3	65
Region II	8	3	7	7	10	12	47
Region III	2	3	2	2	4	7	20
Region IV	1	12	9	9	10	4	45
Total	16	34	37	23	41	26	177

1975-1976

Region	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Region I	7	16	18	18	24	20	103
Region II	3	12	7	11	9	10	52
Region III	6	4	7	5	5	7	34
Region IV	1	7	6	16	13	9	52
Total	17	39	38	50	51	46	241

Development of the Graduate Survey Instrument.

The Student Follow-up Questionnaire (see page III-18) currently in use by the Office of Vocational Education, Georgia Department of Education, formed the foundation for the graduate survey instrument used in the cluster study. An extensive review of the literature on follow-up studies in vocational education was conducted in an effort to locate any parallel studies or any usable instruments. This review suggested several desirable alterations and additions to the basic form which would improve its data collection capacities and bring it more closely in line with the specific needs of the cluster study. The specifications of the cluster study also dictated several requirements of the instrument in terms of the data which must be collected.

The draft version of the graduate survey instrument was reviewed and approved by both the Project Executive Committee and the Steering Committee. The final version of the survey instrument appears on pages III-20 through III- 25. It was felt that a separate field test of this instrument was neither necessary nor appropriate for the following reasons;

1) Many items were taken directly from existing established instruments.
2) Many of the new items were field tested on the Current Student Survey instrument and the Parent Survey instrument.
3) Many of the new items have face validity.
4) All items underwent extensive review by project staff, the Executive Committee, the Steering Committee, and several independent evaluators.
5) The project time-frame and resources did not allow for the type of field test that would be statistically meaningful.

Dear Former Student:

In order that we may continue to maintain and improve the high level of quality in vocational education in the State of Georgia, we are seeking your assistance.

Please take a few minutes and complete this survey form **today**. This survey allows us to judge the effectiveness of our programs based on the experiences and comments of former students. Your responses, along with those of other former students, will assist us in evaluating the effectiveness of vocational education. Tell it like it is! All information is strictly confidential. Your response will be grouped with others, and your name will not be associated with the information you give.

Your assistance is greatly appreciated.

GEORGIA STATE DEPARTMENT OF EDUCATION
OFFICE OF VOCATIONAL EDUCATION

Student Follow-up Questionnaire
DE FORM 0947, November/1978

Please read each question and carefully follow the directions.

1. Are you now attending school? (Check one)

a. ☐ Full-time Name of School ____________________
b. ☐ Part-time
c. ☐ Not attending

2. Are you now employed? (Check one)

a. ☐ Full-time (30-hours per week or more)
b. ☐ Part-time (1-29 hours per week)
c. ☐ Full-time military service
d. ☐ Self-employed
e. ☐ Unemployed (looking for a job)
f. ☐ Unemployed (not looking for a job)

3. If you are now employed, give your present job title.

____
(Please Print)

4. Briefly describe your job duties. ____________________
(Please Print)

____

____

5. Is your job related to your vocational training? (Check one)
a. ☐ Job is the **same** type work as training
b. ☐ Job in a type of work **related** to training
c. ☐ Job in **different** type of work than training

6. Where is your job located in relation to the school where you received your vocational training? (Check one)

a. ☐ Within 50 miles and in Georgia
b. ☐ Over 50 miles and in Georgia
c. ☐ Within 50 miles and in another state
d. ☐ Over 50 miles and in another state

7. What are your average weekly earnings before deductions? (Check one)

a. ☐ under $75
b. ☐ $75 to $100
c. ☐ $101 to $125
d. ☐ $126 to $150
e. ☐ $151 to $175
f. ☐ $176 to $200
g. ☐ $201 to $250
h. ☐ $251 or more

8. How many hours do you work per week? ____________________

---

9. Since completing your vocational training, have you ever worked in a job directly related to this training? (Check one)

a. ☐ Yes   b. ☐ No

---

10. If you are unemployed or presently working in a job not related to your training, check the box that best describes why you have not been available for employment in this type of work.

a. ☐ Took course for personal rather than employment reasons
b. ☐ Became pregnant
c. ☐ Marital status changed
d. ☐ Continued education
e. ☐ Unwilling to move
f. ☐ Became disabled
g. ☐ Other, specify

---

11. How would you rate the following things about the vocational training you received? (Check one block after each statement)

	Good	Fair	Poor
a. How well did your training prepare you for your job?	☐	☐	☐
b. Was the instructional content up-to-date?	☐	☐	☐
c. Were instructional tools and equipment similar to those used on the job?	☐	☐	☐
d. Was instruction well presented in the classroom?	☐	☐	☐
e. Was instruction well presented in the lab?	☐	☐	☐
f. Was instruction well organized?	☐	☐	☐

---

12. Would you recommend this school to others? (Check one)

a. ☐ Yes   b. ☐ No

---

13. What recommendations do you have for improving the vocational education program? ________

____

____

____

14. Information about your employer:

____
EMPLOYER (FIRM NAME)

____
NUMBER AND STREET OR P.O. BOX NUMBER (ABBREVIATED)

____
CITY, TOWN, OR POST OFFICE   STATE

Name of Immediate Supervisor

____
LAST   FIRST   MI

____
EMPLOYER'S MAJOR PRODUCT OR SERVICE

____
15. Signature of Former Student

____
16. Date Signed

(   ) ____________________
17. Telephone Number

PLEASE FOLD, SEAL AND DROP IN THE MAIL. (POSTAGE IS PREPAID)

FORMER STUDENT SURVEY: VOCATIONAL CLUSTER SURVEY

Dear Former Student:

Our records show that during the time you attended ______________________________ you were enrolled in one or more of the following vocational courses for the length of time shown.

Course	Years Completed
(1) Electro-Mechanics	______
(2) Metal Fabrication	______
(3) Construction	______
(4) Transportation	______
(5) Health Occupations	______

If the information we show here is not correct, please make any necessary corrections so that we will have the correct information.

The questions we will be asking in this survey about your high school training will be about the vocational courses shown above that you took.

First, tell us about your present status.

1. Are you now employed? (check one)

   ☐ (1) Full-time (30 hours per week or more)
   ☐ (2) Part-time (1-29 hours per week)
   ☐ (3) Full-time military service
   ☐ (4) Self-employed
   ☐ (5) Unemployed (looking for a job)
   ☐ (6) Unemployed (not looking for a job)

If you checked (5) or (6), skip to question 17.

2. If you are now employed, give your present job title.

   ____
   (Please Print)

3. Briefly describe your job duties. ______________________________

   ____

4. Is your job related to your high school vocational training? (check one)

   ☐ (1) Job is the same type work as training
   ☐ (2) Job in a type of work similar to training
   ☐ (3) Job in a different type of work than training

If you checked (1) or (2), go to question 6.

5. If you checked answer (3) in question 4, why are you not working in the same type of work as your high school training? (check the most important reason)

☐ (1) No jobs were available in my area of training when I first started work.
☐ (2) I didn't like the type of work I was trained for.
☐ (3) I received additional training or education in another field.
☐ (4) Jobs don't pay enough in the area of my original training.
☐ (5) There is no opportunity for advancement in the area of my original training.
☐ (6) I have been promoted out of my original area.
☐ (7) Jobs are no longer available in the field of my original training.
☐ (8) Personal or health reasons
☐ (9) Other ____

6. How many employers have you worked for full-time since high school graduation? (Enter the number of employers in each category below)

(1) ____ employers in the same type work as my high school vocational training.
(2) ____ employers in a type of work similar to my high school training.
(3) ____ employers in a different type of work from my high school training.
____ Total number of employers.

7. Looking back over the years, how did the first full-time job you had after high school compare with your present job?

A. Annual Salary?

	First Job	Present Job
(1) $5,000 - $9,999	☐	☐
(2) $10,000 - $14,999	☐	☐
(3) $15,000 - $19,999	☐	☐
(4) $20,000 - $24,999	☐	☐
(5) $25,000 or more	☐	☐

B. How far from where you lived when you went to high school?

	First Job	Present Job
(1) In my home community	☐	☐
(2) Within 50 miles and inside Georgia .	☐	☐
(3) Over 50 miles and inside Georgia ..	☐	☐
(4) Within 50 miles and outside Georgia	☐	☐
(5) Over 50 miles and outside Georgia ..	☐	☐

8. What was your job title in your first full-time job after high school?

____

9. Briefly describe your duties in that first job. ______________________

____

10. How did you locate your first job after high school? (check one)

- ☐ (1) Instructor helped me find it
- ☐ (2) School counselor
- ☐ (3) School placement office
- ☐ (4) Other school personnel
- ☐ (5) Co-op program
- ☐ (6) Family or friends
- ☐ (7) Private employment agency
- ☐ (8) Public employment agency
- ☐ (9) I found it myself
- ☐ (10) Other ______________________________

11. How satisfied are you with your present working conditions?

- ☐ (1) Very satisfied
- ☐ (2) Pretty well satisfied
- ☐ (3) Somewhat dissatisfied
- ☐ (4) Very dissatisfied

12. How satisfied are you with your present wages?

- ☐ (1) Very satisfied
- ☐ (2) Pretty well satisfied
- ☐ (3) Somewhat dissatisfied
- ☐ (4) Very dissatisfied

13. How satisfied are you with your present job in general?

- ☐ (1) Very satisfied
- ☐ (2) Pretty well satisfied
- ☐ (3) Somewhat dissatisfied
- ☐ (4) Very dissatisfied

14. Does your present job provide you with the kind of life that you want for yourself and your family?

- ☐ (1) Definitely yes
- ☐ (2) Pretty much
- ☐ (3) Not exactly
- ☐ (4) Definitely not

15. How do things look for the future in your career?

- ☐ (1) Very positive, will continue to improve
- ☐ (2) Will probably be better in the future
- ☐ (3) About the same
- ☐ (4) Things may not be as good as they have been
- ☐ (5) Very pessimistic, things don't look good

16. Do you plan to continue working in the same type work or to change careers?

- ☐ (1) Will definitely stay in the same career.
- ☐ (2) Probably will stay in the same type work.
- ☐ (3) Don't know.
- ☐ (4) Probably will change.
- ☐ (5) Will definitely change to another career.

SKIP TO QUESTION 22 IF YOU ARE NOW EMPLOYED.

THIS SECTION IS FOR PEOPLE WHO ARE NOT NOW EMPLOYED.

17. Have you ever worked full-time or part-time since high school?

- ☐ (1) Worked full-time
- ☐ (2) Worked part-time
- ☐ (3) Have not worked

IF YOU HAVE WORKED:

18. How long did you work? Years _____ Months _____.

19. How long has it been since your last job? Years _____ Months _____.

20. How many employers have you worked for in jobs related to your high school vocational training? (Fill in the number of employers for each category)

(1) _____ employers in the same type work as my high school training.
(2) _____ employers in a type work similar to my high school training.
(3) _____ employers in a type work different from my high school training.
_____ Total number of employers.

21. Why are you now unemployed? (check one)

- ☐ (1) Full-time homemaker
- ☐ (2) Going to school
- ☐ (3) On temporary layoff
- ☐ (4) No jobs available
- ☐ (5) Do not want to work
- ☐ (6) Health problems
- ☐ (7) Physical handicaps
- ☐ (8) Looking for a job
- ☐ (9) Other ______________________________

ALL RESPONDENTS, PLEASE ANSWER QUESTIONS 22 - 28

22. Now would you tell us about any additional education you have had since high school? (check all that apply)

	Now Enrolled	Took Some	Completed
(1) None ☐ check here if none			
(2) Apprentice	☐	☐	☐
(3) Management training program	☐	☐	☐
(4) Company technical program	☐	☐	☐
(5) Course by mail	☐	☐	☐
(6) Vocational-Technical school	☐	☐	☐
(7) Junior college	☐	☐	☐
(8) Four-year college	☐	☐	☐
(9) Graduate degree	☐	☐	☐
(10) Other ____________	☐	☐	☐

23. Looking back on your high school vocational training, how would you rate the following things about the training you received? (check one block after each statement)

	Good	Fair	Poor
(1) How well did your training prepare you for a job?	☐	☐	☐
(2) Was the instructional content up-to-date?	☐	☐	☐
(3) Were instructional tools and equipment up-to-date?	☐	☐	☐
(4) Was instruction well presented in the classroom?	☐	☐	☐
(5) Was instruction well presented in the shop?	☐	☐	☐
(6) Was instruction well organized?	☐	☐	☐

24. How well do you think your high school vocational training prepared you to do the following tasks? (check one block after each statement)

	Good	Fair	Poor
(1) To do any paper work required by a job?	☐	☐	☐
(2) To read job related materials?	☐	☐	☐
(3) To do job related math?	☐	☐	☐
(4) To know the skills required on the job?	☐	☐	☐
(5) To use tools and equipment needed on the job?	☐	☐	☐
(6) To know good quality work from bad work?	☐	☐	☐
(7) To fill out a job application?	☐	☐	☐
(8) To handle a job interview?	☐	☐	☐
(9) To know where to find a job?	☐	☐	☐
(10) To know how to find a job?	☐	☐	☐
(11) To know the value of getting to work on time?	☐	☐	☐
(12) To know the value of going to work every day?	☐	☐	☐
(13) To know the value of staying at work all day?	☐	☐	☐
(14) To know how to get along with other employees?	☐	☐	☐
(15) To know how to get along with the boss?	☐	☐	☐

25. All in all, would you recommend your high school vocational training program for students today?

☐ (1) Definitely yes
☐ (2) Probably yes
☐ (3) I don't know
☐ (4) Probably not
☐ (5) Definitely not

26. How do you think high school vocational training in Georgia today compares with when you were in high school?

☐ (1) Much better today
☐ (2) Probably better today than when I was in school
☐ (3) I don't know
☐ (4) Probably better when I was in school
☐ (5) Definitely better when I was in school

27. Please give us your ideas on how high school vocational training in Georgia can be improved. ____

____
____
____
____

28. If you are now employed or have been employed, would you give us the following information about your present or most recent employer. This information will be used for research purposes only.

____
Employer (Firm Name)

____
City, Town, or Post Office State

____
Employer's Major Product or Service

THANK YOU FOR YOUR HELP

Selection of Graduate Respondents.

Random selection of respondents was accomplished in the following manner.

1) It was determined from the ratio of the total graduate census population to the sample size (3549/418 = 8.28), that a sampling interval of eight should be used to draw respondents from the census.
2) The census for each school in the study was divided into two subpopulations by year of graduation category (1970-1974 and 1975-1976).
3) Each of the cluster areas in the subpopulations from 2) above formed a sampling frame.
4) Graduates were drawn from each sampling frame, starting randomly with one of the first ten graduates in the frame and selecting every eighth graduate until the sample size for that frame was satisfied. The sampling distribution, shown in Appendix D was calculated previously. The random starting point was determined by the use of the second indicator on a digital watch.

Sample Replacement.

If at the time of selection the graduate drawn for the sample was found to be inadequate because of incomplete address, illegible writing, or in a few cases because of duplicate listing, an alternate respondent was selected by going back to the sampling frame from which the rejected respondent was chosen and locating the next closest complete name and address in the frame with the same number of years of training and the same sex as the rejected graduate. In this manner the graduate chosen as a replacement for the sample was from the same school, the same year of graduation, the same cluster, the same number of years of training and the same sex as the rejected respondent. This procedure should have introduced no bias into the sample when replacement was necessary. This same sample replacement procedure was used during the survey process if the Postal Service returned mail addressed to graduates because of inadequate or incorrect address.

Graduate Address Verification.

The first step in the mailout process for the graduate survey was an attempt to verify each graduate's correct address before the questionnaire was mailed. This address verification was conducted in order to save on the cost of postage from undeliverable questionnaires. The second week in June each of the graduates identified for the sample was mailed an address correction inquiry letter. (See page III-30 for a copy of the inquiry.) Of the original 416 inquiries mailed, 106 (25.5%) were returned by the Postal Service as undeliverable due to inadequate address or no forwarding address.

Of the 106 inquiries returned by the Postal Service, 30 were found to be from one school district in which all postal routes had been reorganized three times in the last five years. A telephone follow up effort was undertaken which resulted in the location of 25 of these graduates.

In those cases in which no current address could be obtained, a substitute graduate was selected for the survey sample using the method described in the preceding section. The addresses reported on the graduate census provided by the sample schools are, almost without exception, the addresses of parents or guardians of the graduates prior to the time of graduation. Since no followup system was in operation for graduates during 1970-1976, the years from which the graduates were selected, no forwarding or current addresses were available for most graduates. Because most graduates from 1970-1976 no longer live with parents or guardians, the determining factor in locating a graduate was whether the parents or guardian could still be located at the address reported on the census. If they were still present at the same address, had friends or relatives at the same address, or had moved with a forwarding address within the last twelve months, their mail was forwarded by the Postal Service; and the parents in turn forwarded the mail to the graduate. It is unknown whether graduates who could not be located in 1979 through a 1970-1976 parental address differ in any significant fashion relevant to the study from those who can be located through such an address.

In summary, the first step in the survey of graduates was an attempt to verify the current addresses of the individuals selected in the sample. Address correction inquiries were mailed to the original sample of 416 graduates, and to 87 substitutes who were selected as a result of Postal Service rejections of 87 original respondents. Of the total of 503 address inquiries mailed, a total of 122 were returned by the Postal Service as undeliverable, 112 were responded to by the graduates, and 182 were not responded to by the graduates nor were they rejected by the Postal Service. Of the 112 graduates who responded to the inquiry, 56 (50%) reported a change of address.

Conducting the Graduate Survey

The actual survey of the graduates began on June 20 as the first address verifications were received from the address verification mail-out. As soon as an address was verified, a copy of the graduate questionnaire, a postage paid business reply envelope, and a cover letter from Dr. Charles McDaniel, State Superintendent of Schools, were mailed to the graduate. (See page III- 31 for a copy of the cover letter from

Dr. McDaniel.) This mailout process was continued until the second week in July at which time the return of address verification inquiry letters had slowed to fewer than one per day. On July 11 the decision was made to mail questionnaires to the remainder of the sample at the last known address. Of the total of 416 questionnaires mailed, 25 (6.0% of the sample) were returned by the Postal Service as undeliverable. Substitutes were selected for these and new questionnaires were mailed.

By August 17 questionnaires had been completed and returned by 112 of the 416 graduates in the survey sample. This figure represents a 27% return rate. To that point no follow-up letters had been mailed to non-responding graduates. From August 21 through August 31 follow-up packages were mailed to 303 non-responding graduates. The follow-up package consisted of the original survey materials that were included in the initial mail-out, plus a new cover letter. (See page III-32 for a copy of the new cover letter.)

There was an increased return rate of questionnaires from cluster graduates during September as a result of the follow-up letters mailed in August. By September 30, the final date by which returned questionnaires could be accepted for data processing, completed surveys had been received from 148 graduates. This figure represents a return rate of 36% of the original sample of 416.

Data coding of the information on the graduate questionnaires began in mid-September and was completed for all returned questionnaires by the September 30 cut-off date. None of the completed and returned questionnaires was rejected from data processing due to errors of completion or for any other reason.

THE UNIVERSITY OF GEORGIA
COLLEGE OF EDUCATION
DIVISION OF VOCATIONAL EDUCATION
VOCATIONAL EDUCATION MATERIALS CENTER
GREEN STREET
ATHENS, GEORGIA 30602

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Make any corrections here.

____

____

____

☐ Please check here if this name and address are correct.

The Department of Education of the State of Georgia is conducting a follow-up study of its high school vocational graduates. Dr. Charles McDaniel, State Superintendent of Education, would very much like to contact you. He has asked us to verify your current address.

Please inspect the address label on this letter. If you have had a name change or address change, please give us the new correct information in the space to the right of the address label. After you have inspected the label, please place this letter in the postage paid envelope and mail it to us today.

You have been chosen to represent a large number of fellow graduates, so your participation in the study is very important. This is a chance for you to have a real impact on improving vocational education in Georgia.

Sincerely,

Charles C. Connor
Instructional Research Analyst

CCC/jm

Enclosure

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION INSTITUTION

STATE OF GEORGIA
DEPARTMENT OF EDUCATION
OFFICE OF THE STATE SUPERINTENDENT OF SCHOOLS
STATE OFFICE BUILDING
ATLANTA 30334

CHARLES McDANIEL
State Superintendent of Schools

Dear Former Student:

I am writing you to ask for your help in a most important matter. The Department of Education of the State of Georgia and the Georgia State Legislature are conducting a study to find out how high school vocational training in Georgia can be improved. You have been chosen as one of a sample of 400 to represent former vocational students who graduated from high school in Georgia between 1970 and 1976. Since we are only asking for information from such a small select number of former students, the information you can give us about your experiences after graduation and your opinion of your training in high school are very valuable to us.

Please take a few minutes today to complete the enclosed survey form and return it in the postage paid envelope to the University of Georgia where the data are being collected and analyzed. Your answers will be kept confidential and will only be used in making reports, charts and graphs showing summaries.

We need your help, and by helping us you will be making a significant contribution to the further growth and development of high school vocational education in Georgia.

Sincerely,

Charles McDaniel

Charles McDaniel
State Superintendent of Schools

CM:mjt

Enclosure

THE UNIVERSITY OF GEORGIA
COLLEGE OF EDUCATION
DIVISION OF VOCATIONAL EDUCATION
VOCATIONAL EDUCATION MATERIALS CENTER
GREEN STREET
ATHENS, GEORGIA 30602

AGRICULTURAL EDUCATION
BUSINESS AND OFFICE EDUCATION
DISTRIBUTIVE EDUCATION
HEALTH OCCUPATIONS EDUCATION
HOME ECONOMICS EDUCATION
INDUSTRIAL ARTS EDUCATION
TRADE AND INDUSTRIAL EDUCATION

VOCATIONAL EDUCATION MATERIALS CENTER

Did you ever wish that someone would ask you how the schools should be run? Well, we are asking. We are asking you to look at your personal experience and tell us what we did right and what we did wrong in your high school vocational training. We need that information to design and provide the best possible education for Georgians. You have been chosen to represent the vocational students in your graduating class. We need to hear from you.

Several weeks ago we sent you a survey form asking for information that will help us evaluate our high school programs. So far we have not heard from you. In case you misplaced the first letter or didn't get it, I have enclosed another copy of the survey form and the original letter sent to you by Dr. Charles McDaniel, the State Superintendent of Schools. Please take fifteen minutes today to complete the survey and mail it back to us.

Thank you for your help.

Sincerely,

Charles C. Connor

Charles C. Connor
Instructional Research Analyst

CCC/hp

Enclosure

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION INSTITUTION

Survey of Employers

The survey of employers of cluster graduates utilized a questionnaire developed specifically for this project. The survey questionnaire combined some items from available state and federal forms with some questions designed specifically for the purposes of this study. (Copies of the employer survey form and cover letter appear on pages III- 34 through III-36.) Employers of cluster graduates were asked to rate the skill preparedness of graduates. They were also questioned about additional training that was required in order for the graduates to perform their jobs. The questionnaire includes items about the graduates' technical knowledge and employability skills (are the graduates work oriented?). In addition, information was collected concerning promotions and advancement pace. Many of the items on the employer questionnaire were designed to parallel items on the graduate survey form.

Selection of Employer Respondents

The sample of employers of graduates was generated from the names and addresses of employers reported to the project staff by cluster graduates on their completed questionnaires. The only employers with whom no attempt was made to survey were in those instances where the graduate was self-employed or in the military. Except for those two categories, survey forms were sent to all employers for whom a complete address was provided or could be obtained. In every case in which there was any doubt about the address a telephone search was conducted to try to locate the employer to verify the correct address. A total of 127 employers were identified who could be mailed a survey form.

EMPLOYER SURVEY: STATE OF GEORGIA VOCATIONAL CLUSTER STUDY

Dear Employer/Supervisor:

The questions asked in this survey will give us information regarding the effectiveness of vocational education in Georgia in preparing students to perform on the job. If the employee named on the letter attached to this survey no longer works for you, please rate his performance at the time he worked for you.

> NOTE: This report is authorized by the Georgia General Assembly. While you are not required to respond to this survey, your cooperation is needed to insure that the results of this effort are comprehensive, reliable, and timely. This form contains no employee identifiable information. The code number in the upper right-hand corner contains information about the vocational training the employee has received. No part of the code contains employee identifiers. Please remove the cover letter before returning this form.

1. How many employees work for your firm? ____________________

2. What is the primary product or service that you provide? ____________________

____

3. Does the employee named in the cover letter still work for you?
☐ (1) Yes
☐ (2) No

4. If not, was employee's termination voluntary?
☐ (1) Yes
☐ (2) No

5. Reason for termination.

☐ (1) Unable to perform job
☐ (2) Unwilling to perform job
☐ (3) Dissatisfied with pay
☐ (4) Dissatisfied with working conditions
☐ (5) Personality conflict on the job
☐ (6) Got a better job offer
☐ (7) Personal, family, or health reasons
☐ (8) Part of company layoff
☐ (9) Other ____________________________________
☐ (10) Don't know

6. When the employee first came to you did he require additional training in order to perform his job?
☐ (1) Yes
☐ (2) No

7. If yes, what was the subject matter of that training?

☐ (1) Basic skills
☐ (2) Specialized skills/ Technical training
☐ (3) Company procedures
☐ (4) Management or supervisory training
☐ (5) Other ____________________________________

8. If yes, where was the training performed?

☐ (1) On the job
☐ (2) In a company training school
☐ (3) In a community Voc-Tech school
☐ (4) Other ______________________________

9. How many promotions has the employee received since coming to work for you?

____

10. Is the employee (or was he/she at the time of termination) being considered for promotion? ☐ (1) Yes
☐ (2) No

11. Was the employee hired as a temporary or permanent employee? ☐ (1) Temporary
☐ (2) Permanent

12-30. Please rate the employee's competence in the following job related abilities:

	Good	Fair	Poor	Don't Know
12. To do any paper work required by the job?...	☐	☐	☐	☐
13. To read job related materials?	☐	☐	☐	☐
14. To do job related math?	☐	☐	☐	☐
15. Performing the skills required by the job?..	☐	☐	☐	☐
16. Using the tools and equipment needed on the job?	☐	☐	☐	☐
17. To do high quality work on the job?	☐	☐	☐	☐
18. To fill out a job application?	☐	☐	☐	☐
19. To handle a job interview?	☐	☐	☐	☐
20. To communicate in job related situations? ..	☐	☐	☐	☐
21. To follow directions and obey orders of supervisors?	☐	☐	☐	☐
22. Getting to work on time?	☐	☐	☐	☐
23. Coming to work every day?	☐	☐	☐	☐
24. Doing a full day's work each day?	☐	☐	☐	☐
25. To accept responsibility?	☐	☐	☐	☐
26. To finish assignments on time?	☐	☐	☐	☐
27. To get along with other employees?	☐	☐	☐	☐
28. To cooperate with company policies?	☐	☐	☐	☐
29. To get along with the boss?	☐	☐	☐	☐
30. To learn the skills needed for promotion?...	☐	☐	☐	☐

31. Please list any other positive aspects or deficiencies of this employee's training or performance not covered by this survey.

____

____

THANK YOU FOR YOUR HELP

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Dear Employer:

The Department of Education of the State of Georgia and the Georgia State Legislature are in the process of evaluating how well our high school vocational programs are preparing students for employment. You, as an employer, can help us determine if we are accomplishing our desired goal. We want to be sure that our graduates are properly prepared with the necessary skills and attitudes to perform capably in your employ and be an asset to your organization.

The employee named above has identified you as his/her current or last employer. Please refer the accompanying survey form to the immediate supervisor of the employee or to another person who knows the employee's job performance and employment history with your company. A postage paid envelope is enclosed for return of the survey to the University of Georgia where the results are being analyzed.

Supervisors' responses will help us identify strengths and limitations of our occupational training programs. These responses will be held in confidence and will only be used in a summary report.

We need your help, and by helping us you will be making a significant contribution to the further growth and development of high school vocational education in Georgia.

Sincerely,

Charles C. Connor

Charles C. Connor
Instructional Research Analyst

CCC/hp

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8. If yes, where was the training performed?

☐ (1) On the job
☐ (2) In a company training school
☐ (3) In a community Voc-Tech school
☐ (4) Other ______________________________

9. How many promotions has the employee received since coming to work for you?

____

10. Is the employee (or was he/she at the time of termination) being considered for promotion? ☐ (1) Yes
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☐ (2) Permanent

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		Good	Fair	Poor	Don't Know
12.	To do any paper work required by the job?...	☐	☐	☐	☐
13.	To read job related materials?	☐	☐	☐	☐
14.	To do job related math?	☐	☐	☐	☐
15.	Performing the skills required by the job?..	☐	☐	☐	☐
16.	Using the tools and equipment needed on the job?	☐	☐	☐	☐
17.	To do high quality work on the job?	☐	☐	☐	☐
18.	To fill out a job application?	☐	☐	☐	☐
19.	To handle a job interview?	☐	☐	☐	☐
20.	To communicate in job related situations? ..	☐	☐	☐	☐
21.	To follow directions and obey orders of supervisors?	☐	☐	☐	☐
22.	Getting to work on time?	☐	☐	☐	☐
23.	Coming to work every day?	☐	☐	☐	☐
24.	Doing a full day's work each day?	☐	☐	☐	☐
25.	To accept responsibility?	☐	☐	☐	☐
26.	To finish assignments on time?	☐	☐	☐	☐
27.	To get along with other employees?	☐	☐	☐	☐
28.	To cooperate with company policies?	☐	☐	☐	☐
29.	To get along with the boss?	☐	☐	☐	☐
30.	To learn the skills needed for promotion?...	☐	☐	☐	☐

31. Please list any other positive aspects or deficiencies of this employee's training or performance not covered by this survey.

____

____

THANK YOU FOR YOUR HELP

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The employee named above has identified you as his/her current or last employer. Please refer the accompanying survey form to the immediate supervisor of the employee or to another person who knows the employee's job performance and employment history with your company. A postage paid envelope is enclosed for return of the survey to the University of Georgia where the results are being analyzed.

Supervisors' responses will help us identify strengths and limitations of our occupational training programs. These responses will be held in confidence and will only be used in a summary report.

We need your help, and by helping us you will be making a significant contribution to the further growth and development of high school vocational education in Georgia.

Sincerely,

Charles C. Connor

Charles C. Connor
Instructional Research Analyst

CCC/hp

Conducting the Employer Survey

As soon as employers with correct addresses could be identified the mailout to employers began. The first questionnaires were mailed on July 30. By the September 30 cutoff date that was established for the acceptance of questionnaires for data processing, 127 employer survey forms had been mailed out, and 64 employers had returned completed usable questionnaires. This represents a return rate of 50%.

Great care was exercised during the employer survey to ensure that both the data collection requirements and the graduates' rights to privacy were maintained. No information about the graduate was divulged to the employer; and once a graduate's questionnaire was completed and returned by the employer, the link between the particular graduate and his employer was broken in all research documents and data files. No employer evaluation can be tied to a particular graduate by name, number, or school either in the paper files or in the data processing files. This data control security was maintained by use of the Employer Data Sheet (which appears on page III-38. When the employer identification was reported to the research staff on the graduate questionnaire, the employer's name and address were clipped from the last page of the questionnaire and taped temporarily to the Employer's Data Sheet. At the same time the information for items 3-6 was copied from the graduate questionnaire. The graduate's identification number was copied onto the clipping containing the employer name and address. Once the employer survey form was returned completed, the employer name and address and the graduate identification number which had been temporarily attached to the Employer Data Sheet were detached and destroyed, leaving no link between the employer evaluation and the particular graduate.

EMPLOYER DATA SHEET

(Attach Employer Address Here)
(Temporarily)

Date Mailed ___/___

Date Received ___/___

Follow-ups:

Date ___/___

Date ___/___

Comments:

1. Survey Number 2

2. Employer number ___ ___ ___

3. Student region and year of graduation ___ ___

4. Course — Years Completed

Course	Years Completed
(1) Elect. Mech.	___
(2) Metal Fab.	___
(3) Construction	___
(4) Transportation	___
(5) Health Occup.	___

5. Item 4. Is job related to high school training?

☐ (1) Same
☐ (2) Similar
☐ (3) Different

6. Item 13. How satisfied are you with present job?

☐ (1) Very satisfied
☐ (2) Pretty well satisfied
☐ (3) Somewhat dissatisfied
☐ (4) Very dissatisfied

Survey of Current Cluster Students

The survey of current cluster students had a degree of urgency attached to it from the beginning of the study because of the overlapping of the timeline restriction for the study and the end of the spring term in Georgia's comprehensive high schools. It was necessary that the survey be completed by the end of May, 1979.

Development of the Current Student Survey Instrument

As in the development of all of the other survey instruments, the development of the current student survey form first had to satisfy the requirements of the RFP. The items that were developed for the instrument were designed to parallel the items on the graduate questionnaire, the employer questionnaire, and the parent questionnaire on all the common dimensions measured by those instruments. The current student instrument also measured dimensions of career orientation of students, career expectations, and aspects of counseling and guidance provided by the school.

Drafts of the instrument were reviewed by members of the University of Georgia faculty skilled and experienced in the development of survey instruments and in survey research and evaluation, and by the Cluster Project Steering Committee. A field test version of the survey form was prepared and field tested with three classes of students at Clarke Central High School, one of the designated field test schools. The most significant result of the field test was a modification in procedures for administering the current student questionnaire. Several students in the field test group were observed to not be able to read (and/or write) at a high enough level to be able to give meaningful responses to the written items. It was decided that the instructions for completing the questionnaire and all questionnaire items would be read aloud by the cluster study staff member administering the questionnaire. This procedure proved successful in increasing the number of satisfactory responses, and actually reduced the time for administration of the survey.

Sampling the Current Cluster Students

The sampling population selected for the survey of current cluster students was the students currently enrolled, during the Spring term of 1979, in one of the twenty sample schools identified for the study and in one of the five clusters selected for the study. Each cluster that is offered by a school is taught during three two-hour classes per day at most schools. The sampling strategy used was to survey all the students in the classroom during two of the three classes. The two classes chosen for each cluster were the classes containing the most juniors and seniors, as identified by the vocational supervisor at the school. In those schools in which cluster classes were offered only twice a day, both classes were surveyed. Days were arranged for the survey at each school during which absenteeism was expected to be normal. This procedure resulted in a greater than two-thirds sample of students currently enrolled in the study clusters in the sample schools.

Conducting the Survey of Current Cluster Students

All cluster study staff members who were to administer the survey in the classroom were given training in-house in proper procedures prior to going to the sample schools. In addition, step by step written directions were provided for data collection procedures and survey administration. Those directions can be found in Appendix E.

Between May 16 and May 30, 1979, members of the cluster study staff surveyed 1850 current cluster students in the classrooms in the twenty sample schools. Detailed totals for the students surveyed in each school are contained in Appendix E. Because of the large number of completed surveys obtained, a stratified random sample of 337 of the surveys was selected for data processing.

CURRENT STUDENTS SURVEY: VOCATIONAL CLUSTER STUDY

Dear Student:

The State Department of Education is presently conducting a study to find out how we can improve the high school vocational programs. We need information that students can give us. We will keep your answers confidential and will only use them in making up reports, charts, and graphs showing summaries. Your name and address will be used only for follow-up information later in the study. Please give us your best answers. Thank you for your help.

1. School Name ______________________________ 2. County ____________

3. Your Name ______________________________ 4. Birth Date __/__/__

5. Address ______________________________ 6. Telephone (area) ____

______________________ Zip: ________ ______________

7. Sex:
☐ (a) Male
☐ (b) Female

8. Your Current Grade:
☐ (a) 9th
☐ (b) 10th
☐ (c) 11th
☐ (d) 12th

9. Is your school on the quarter or semester?
☐ (a) Quarter
☐ (b) Semester

10. Please tell us which vocational course you are CURRENTLY enrolled in by placing the number of quarters or semesters you have completed, including the present quarter or semester, in the blank beside your course.
__(a) Electro-Mechanics
__(b) Metal Fabrication
__(c) Construction
__(d) Transportation
__(e) Health Occupations

11. If you were previously enrolled in another vocational course, indicate below which course you were enrolled in and how many quarters or semesters you completed in that course.
__(a) Agriculture
__(b) Conservation, Recreation and Wildlife
__(c) Construction
__(d) Drafting and Design
__(e) Electro-Mechanical
__(f) Electronics
__(g) Food Service
__(h) Forestry
__(i) Health
__(j) Marketing and Distributive Ed.
__(k) Metal Fabrication
__(l) Ornamental Horticulture
__(m) Transportation
__(n) Graphic Arts
__(o) None

12. Why are you taking your present vocational course?
☐ (a) I wanted to take it.
☐ (b) My counselor told me to take it.
☐ (c) I could not get in another class I wanted, so I took this one.
☐ (d) Another student told me it was a good course.
☐ (e) My parents wanted me to take it.
☐ (f) The school made me take it.
☐ (g) Other reason ______________________________
☐ (h) I don't know.

13. Why are you in vocational education courses at all?
☐ (a) To prepare myself for a job.
☐ (b) As a hobby.
☐ (c) As an elective.
☐ (d) Because my friends are here.
☐ (e) My counselor wants me to take vocational courses.
☐ (f) My parents want me to take vocational courses.
☐ (g) Other reason ______________________________

14. Do you want to take vocational education courses?
☐ (a) Yes
☐ (b) No

15. Do you feel that your present vocational course is preparing you for the kind of work that you want to follow as a career?
- ☐ (1) Exactly what I want to do as a career.
- ☐ (2) Sort of like what I want to do.
- ☐ (3) I don't know.
- ☐ (4) Not much like what I want to do.
- ☐ (5) Nothing like what I want as a career.

16. What do you plan to do when you finish high school?
- ☐ (a) Go to work full time.
- ☐ (b) Go to an area vocational/technical school (area vo-tech)
- ☐ (c) Go to a private technical or vocational school.
- ☐ (d) Take a course by mail.
- ☐ (e) Become a homemaker.
- ☐ (f) Join the military.
- ☐ (g) Go to college.
- ☐ (h) Other ______________________________.

17. After you graduate from high school if you were to go right out and look for a job, how far do you think you would have to go to get the kind of job you are training for in your present vocational program?
- ☐ (1) My home community.
- ☐ (2) No more than 50 miles, inside Georgia
- ☐ (3) More than 50 miles, but inside Georgia.
- ☐ (4) Outside of Georgia, but within 50 miles of home.
- ☐ (5) Outside of Georgia and more than 50 miles.

18. Do you think your present vocational course will prepare you to get a job when you graduate that will pay enough money to provide you with the kind of life you want for yourself?
- ☐ (1) Definitely yes.
- ☐ (2) Probably will pay enough.
- ☐ (3) I don't have any idea.
- ☐ (4) Probably will not pay enough.
- ☐ (5) Definitely will not pay enough.

19. How many jobs do you think will be available to a high school graduate in the field of your vocational training when you graduate?
- ☐ (1) More jobs than people.
- ☐ (2) Enough jobs to go around.
- ☐ (3) I don't have any idea.
- ☐ (4) Jobs will be hard to find.
- ☐ (5) Not enough jobs to go around.

20. How would you rate the following things about the vocational training you are receiving in your present course?

	Good	Fair	Poor
(a) How well is your training preparing you for a job?....	☐	☐	☐
(b) Are the things being taught here up-to-date?	☐	☐	☐
(c) Are your tools and equipment up-to-date?	☐	☐	☐
(d) Is instruction well presented in the classroom?.......	☐	☐	☐
(e) Is instruction well presented in the lab?.............	☐	☐	☐
(f) Is instruction well organized?	☐	☐	☐

21. How well do you think your vocational program is preparing you to do the following tasks?

	Good	Fair	Poor
(a) To do any paper work required by a job?	☐	☐	☐
(b) To read job related materials?	☐	☐	☐
(c) To do job related math?	☐	☐	☐
(d) To know the skills required on the job?	☐	☐	☐
(e) To use tools and equipment needed on the job?	☐	☐	☐
(f) To know good quality work from bad work?	☐	☐	☐
(g) To fill out a job application?	☐	☐	☐
(h) To handle a job interview?	☐	☐	☐
(i) To know where to find a job?	☐	☐	☐
(j) To know how to find a job?	☐	☐	☐
(k) To know the value of getting to work on time?	☐	☐	☐
(l) To know the value of going to work every day?	☐	☐	☐
(m) To know the value of staying at work all day?	☐	☐	☐
(n) To know how to get along with other employees?	☐	☐	☐
(o) To know how to get along with the boss?	☐	☐	☐

22. What are the three BEST and the three WORST things about your vocational course?

BEST (1) ____________________

(2) ____________________

(3) ____________________

WORST (1) ____________________

(2) ____________________

(3) ____________________

23. Would you recommend your vocational course to other students?

☐ (1) Definitely yes.
☐ (2) Probably yes.
☐ (3) Probably not.
☐ (4) Definitely not.

24. Please give us your ideas on how vocational training can be improved at your high school. ____________________

____

Survey of Parents

The parents surveyed in this study were the parents of students currently enrolled in the cluster programs. The particular parents selected were the parents of the students included in the current student survey. The most practical way to survey the parents was to give the parents' survey form to the current students for delivery at the time the current students were surveyed. It was necessary, therefore, to have the parents' survey instrument finalized for use at the time of the current student survey.

Development of the Parent Survey Form

The items that were developed for the parent survey were designed to parallel the items on the graduate questionnaire, the employer questionnaire, and the current student questionnaire on all common dimensions measured by those instruments. The parent questionnaire also measured dimensions of parent awareness of their child's career orientation, and the parents' expectations about the job market for their area.

In order to eliminate the problem of masculine and feminine pronouns on the parents' questionnaires, separate survey forms were developed for the parents of male and female students. The only difference between the two versions of the questionnaires is the gender of the pronouns used in reference to the child and the use of the terms "son" and "daughter".

Drafts of the instruments were reviewed by members of the University of Georgia Faculty and by the members of the Steering Committee. A field test version of the survey form was prepared and field tested along with the current student questionnaire at Clarke Central High School. The procedure used during the field test was to have the current students who were surveyed in the classroom take the parent questionnaire home, have it completed by a parent, and return it to school where it was to be picked up by a member of the cluster project staff. After a period of four days 12.5% of the parents' questionnaires had been completed and returned to school. The return rate could have been increased through a follow-up effort, but research requirements for the field test did not require or warrant a follow-up.

Conducting the Parent Survey

During the period of May 16 through May 30, 1979, as the current students were surveyed in the classroom, each student was given a parent questionnaire and a postage paid return envelope with instructions to take the questionnaire home and have a parent complete it and mail it back to the research staff. The parent questionnaire and its corresponding student questionnaire were stamped with the same identifying sequential number so that parents who did not return their questionnaire could be contacted for follow-up if necessary, using the address supplied on the student questionnaire. From the 1850 parent surveys sent out with the current students who were surveyed, 670 (36%) completed parent questionnaires were returned by mail without need for a follow-up.

M

PARENTS' SURVEY: VOCATIONAL CLUSTER STUDY

Dear Parent:

The State Department of Education is conducting a study to find out how we can improve the high school vocational programs. We need information that parents can give us. Our records show that ______________________ is now enrolled in the following vocational program:

☐ (a) Electro-Mechanics
☐ (b) Metal Fabrication
☐ (c) Construction
☐ (d) Transportation
☐ (e) Health Occupations

Would you please spend about 15 minutes and give us your impression of the quality of training that he is receiving in that program? Your answer will be kept confidential. Please complete this survey form and return it in the postage paid envelope today.

1. What is the most important reason your son is enrolled in vocational training? (Check one)

☐ (a) He wants to prepare himself for a career.
☐ (b) He just likes the courses.
☐ (c) It's the only thing he likes to take.
☐ (d) It's what his friends are taking.
☐ (e) His counselor suggested he take vocational training.
☐ (f) The school requires him to take it.
☐ (g) His parents want him to take it.
☐ (h) I don't know.
☐ (i) Other reason ______________________________.

2. What does your son plan to do when he finishes high school? (Check one)

☐ (a) Go to work full time.
☐ (b) Go to an area vocational/technical school (area vo-tech).
☐ (c) Go to a private technical or vocational school.
☐ (d) Take a course by mail.
☐ (e) Become a homemaker.
☐ (f) Join the military.
☐ (g) Go to college.
☐ (h) Other ______________________________.

3. What do you want him to do? (Check one)

☐ (a) Go to work full time.
☐ (b) Go to an area vocational/technical school (area vo-tech).
☐ (c) Go to a private technical or vocational school.
☐ (d) Take a course by mail.
☐ (e) Become a homemaker.
☐ (f) Join the military.
☐ (g) Go to college.
☐ (h) Other ______________________________.

4. Has your son decided what he wants to do as a career? (Check one)

☐ (1) Yes, he knows just what he wants to do.
☐ (2) He has a pretty good idea.
☐ (3) I don't know whether he has or not.
☐ (4) He doesn't know exactly what he wants.
☐ (5) He doesn't have any idea.

5. If your son has decided on a career, is his vocational program training him in the type of work he wants to follow as a career? (Check one)

☐ (1) Exactly what he wants to do as a career.
☐ (2) Sort of like what he wants to do.
☐ (3) I don't know.
☐ (4) He doesn't know what he wants to do.
☐ (5) His training is not much like what he wants to do.
☐ (6) Nothing like what he wants to do.

6. If your son were to go right out after high school graduation and look for a job, how far do you think he would have to go to find the kind of job he is being trained for? (Check one)

☐ (1) In our home community.
☐ (2) No more than 50 miles, inside Georgia.
☐ (3) More than 50 miles, but inside Georgia.
☐ (4) Outside of Georgia, but less than 50 miles from home.
☐ (5) Outside of Georgia, and more than 50 miles.

7. Do you think that your son's vocational training will prepare him to find a job when he graduates from high school that will pay enough money to provide the kind of life you want for him? (Check one)

☐ (1) Definitely yes.
☐ (2) Probably would pay enough.
☐ (3) I don't know.
☐ (4) Probably would not pay enough.
☐ (5) Definitely would not pay enough.

8. How many jobs do you think will be available to a high school graduate in the field of your son's vocational training when he graduates? (Check one)

☐ (1) More jobs than people.
☐ (2) Enough jobs to go around.
☐ (3) I don't know.
☐ (4) Jobs will be hard to find.
☐ (5) Not enough jobs to go around.

9. From what you know about your son's vocational training, how well do you think it is preparing him to do the following tasks? (Check one box for each item.)

	Good	Fair	Poor	Don't Know
(a) To do any paper work required by a job?	☐	☐	☐	☐
(b) To read job related materials?	☐	☐	☐	☐
(c) To do job related math?	☐	☐	☐	☐
(d) To know the skills required on the job?	☐	☐	☐	☐
(e) To use tools and equipment needed on the job?	☐	☐	☐	☐
(f) To know good quality work from bad work?	☐	☐	☐	☐
(g) To fill out a job application?	☐	☐	☐	☐
(h) To handle a job interview?	☐	☐	☐	☐
(i) To know where to find a job?	☐	☐	☐	☐
(j) To know how to find a job?	☐	☐	☐	☐

M

	Good	Fair	Poor	Don't Know
(k) To know the value of getting to work on time?	☐	☐	☐	☐
(l) To know the value of going to work every day?	☐	☐	☐	☐
(m) To know the value of staying at work all day?	☐	☐	☐	☐
(n) To know how to get along with other employees? ...	☐	☐	☐	☐
(o) To know how to get along with the boss?	☐	☐	☐	☐

10. What effect do you think your son's vocational training has had on his attitude about himself? (Check one)

☐ (1) He has a great deal more self-confidence.
☐ (2) He seems to have more self-confidence.
☐ (3) No effect.
☐ (4) He seems to have less self-confidence.
☐ (5) He has a great deal less self-confidence.

11. How has his vocational training affected his attitude toward school? (Check one)

☐ (1) It has greatly improved his attitude toward school.
☐ (2) He seems to have a better attitude about school.
☐ (3) No effect.
☐ (4) His attitude doesn't seem to be as good.
☐ (5) His attitude toward school is much worse.

12. How has your son's vocational training affected his attitude toward work? (Check one)

☐ (1) He has a greatly improved attitude about work.
☐ (2) He seems to have a better attitude about work.
☐ (3) No effect.
☐ (4) His attitude doesn't seem to be quite as good as it was.
☐ (5) His attitude about work is much worse.

13. All in all, what effect do you think vocational training has had on your son?

____

____

____

14. All things considered, would you recommend your son's vocational program to others? (Check one)

☐ (1) Definitely yes.
☐ (2) Probably yes.
☐ (3) Don't know.
☐ (4) Probably not.
☐ (5) Definitely not.

15. Please give us your ideas on how vocational training can be improved at your son's high school?

____

____

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THANK YOU FOR YOUR HELP.

PARENTS' SURVEY: VOCATIONAL CLUSTER STUDY

Dear Parent:

The State Department of Education is conducting a study to find out how we can improve the high school vocational programs. We need information that parents can give us. Our records show that ____________________ is now enrolled in the following vocational program:

☐ (a) Electro-Mechanics
☐ (b) Metal Fabrication
☐ (c) Construction
☐ (d) Transportation
☐ (e) Health Occupations

Would you please spend about 15 minutes and give us your impression of the quality of training that she is receiving in that program? Your answer will be kept confidential. Please complete this survey form and return it in the postage paid envelope today.

1. What is the most important reason your daughter is enrolled in vocational training? (Check one)

☐ (a) She wants to prepare herself for a career.
☐ (b) She just likes the courses.
☐ (c) It's the only thing she likes to take.
☐ (d) It's what her friends are taking.
☐ (e) Her counselor suggested she take vocational training.
☐ (f) The school requires her to take it.
☐ (g) Her parents want her to take it.
☐ (h) I don't know.
☐ (i) Other reason ______________________________.

2. What does your daughter plan to do when she finishes high school? (Check one)

☐ (a) Go to work full time.
☐ (b) Go to an area vocational/technical school (area vo-tech).
☐ (c) Go to a private technical or vocational school.
☐ (d) Take a course by mail.
☐ (e) Become a homemaker.
☐ (f) Join the military.
☐ (g) Go to college.
☐ (h) Other ____.

3. What do you want her to do? (Check one)

☐ (a) Go to work full time.
☐ (b) Go to an area vocational/technical school (area vo-tech).
☐ (c) Go to a private technical or vocational school.
☐ (d) Take a course by mail.
☐ (e) Become a homemaker.
☐ (f) Join the military.
☐ (g) Go to college.
☐ (h) Other ____.

4. Has your daughter decided what she wants to do as a career? (Check one)

☐ (1) Yes, she knows just what she wants to do.
☐ (2) She has a pretty good idea.
☐ (3) I don't know whether she has or not.
☐ (4) She doesn't know exactly what she wants.
☐ (5) She doesn't have any idea.

5. If your daughter has decided on a career, is her vocational program training her in the type of work she wants to follow as a career? (Check one)

   ☐ (1) Exactly what she wants to do as a career.
   ☐ (2) Sort of like what she wants to do.
   ☐ (3) I don't know.
   ☐ (4) She doesn't know what she wants to do.
   ☐ (5) Her training is not much like what she wants to do.
   ☐ (6) Nothing like what she wants to do.

6. If your daughter were to go right out after high school graduation and look for a job, how far do you think she would have to go to find the kind of job she is being trained for? (Check one)

   ☐ (1) In our home community.
   ☐ (2) No more than 50 miles, inside Georgia.
   ☐ (3) More than 50 miles, but inside Georgia.
   ☐ (4) Outside of Georgia, but less than 50 miles from home.
   ☐ (5) Outside of Georgia, and more than 50 miles.

7. Do you think that your daughter's vocational training will prepare her to find a job when she graduates from high school that will pay enough money to provide the kind of life you want for her? (Check one)

   ☐ (1) Definitely yes.
   ☐ (2) Probably would pay enough.
   ☐ (3) I don't know.
   ☐ (4) Probably would not pay enough.
   ☐ (5) Definitely would not pay enough.

8. How many jobs do you think will be available to a high school graduate in the field of your daughter's vocational training when she graduates? (Check one)

   ☐ (1) More jobs than people.
   ☐ (2) Enough jobs to go around.
   ☐ (3) I don't know.
   ☐ (4) Jobs will be hard to find.
   ☐ (5) Not enough jobs to go around.

9. From what you know about your daughter's vocational training, how well do you think it is preparing her to do the following tasks? (Check one box for each item.)

	Good	Fair	Poor	Don't Know
(a) To do any paper work required by a job?	☐	☐	☐	☐
(b) To read job related materials?	☐	☐	☐	☐
(c) To do job related math?	☐	☐	☐	☐
(d) To know the skills required on the job?	☐	☐	☐	☐
(e) To use tools and equipment needed on the job?	☐	☐	☐	☐
(f) To know good quality work from bad work?	☐	☐	☐	☐
(g) To fill out a job application?	☐	☐	☐	☐
(h) To handle a job interview?	☐	☐	☐	☐
(i) To know where to find a job?	☐	☐	☐	☐
(j) To know how to find a job?	☐	☐	☐	☐

	Good	Fair	Poor	Don't Know
(k) To know the value of getting to work on time?	☐	☐	☐	☐
(l) To know the value of going to work every day?	☐	☐	☐	☐
(m) To know the value of staying at work all day?	☐	☐	☐	☐
(n) To know how to get along with other employees? ...	☐	☐	☐	☐
(o) To know how to get along with the boss?	☐	☐	☐	☐

10. What effect do you think your daughter's vocational training has had on her attitude about herself? (Check one)

☐ (1) She has a great deal more self-confidence.
☐ (2) She seems to have more self-confidence.
☐ (3) No effect.
☐ (4) She seems to have less self-confidence.
☐ (5) She has a great deal less self-confidence.

11. How has her vocational training affected her attitude toward school? (Check one)

☐ (1) It has greatly improved her attitude toward school.
☐ (2) She seems to have a better attitude about school.
☐ (3) No effect
☐ (4) Her attitude doesn't seem to be as good.
☐ (5) Her attitude toward school is much worse.

12. How has your daughter's vocational training affected her attitude toward work? (Check one)

☐ (1) She has a greatly improved attitude about work.
☐ (2) She seems to have a better attitude about work.
☐ (3) No effect.
☐ (4) Her attitude doesn't seem to be quite as good as it was.
☐ (5) Her attitude about work is much worse.

13. All in all, what effect do you think vocational training has had on your daughter?

____

____

____

14. All things considered, would you recommend your daughter's vocational program to others? (Check one)

☐ (1) Definitely yes.
☐ (2) Probably yes.
☐ (3) Don't know.
☐ (4) Probably not.
☐ (5) Definitely not.

15. Please give us your ideas on how vocational training can be improved at your daughter's high school.

____

____

____

THANK YOU FOR YOUR HELP.

Survey of the Lay Public

A ten-item questionnaire was developed for conducting a telephone survey of the general population in the geographic areas served by the sample schools in the cluster study. The sample for the survey was drawn randomly from the telephone directories for the school service areas. A sample of 185 names and 185 alternates was selected. This sample was stratified by school area in the same proportions as the current enrollment (Spring, 1979) of students in the clusters being studied in the sample schools.

Five telephone operators were hired to conduct the survey. Calls were made during the daytime hours and during the evening hours until all operating numbers in the primary sample could be contacted. For those numbers which were no longer in service or which did not answer at any attempted contact during the day or night or at which the party answering the telephone refused to cooperate, an alternate number was selected. Using this procedure 185 calls were successfully completed.

A complete script was provided each telephone operator and the operators were rehearsed in the survey procedures before contact with the sample respondents was attempted. Copies of the script, the telephone survey instrument, and the sample distribution appear on pages III-54 through III- 58.

October 1979

TELEPHONE SURVEY: CLUSTER STUDY

SCRIPT

Introduction:

(Hello), this is ________________ at the University of Georgia. We have been asked by the State Department of Education and the State Legislature to conduct a study of community opinion about the vocational training program at __________________ High School. If you have 2 minutes I would like your opinion on a few questions. (Proceed unless respondent objects) First of all, (Question 1)

Objections:

WHO ARE YOU?

This is _________________. I'm at the University of Georgia. We are conducting a public opinion survey for the State Department of Education. I would like to ask you a few questions about Georgia's high school programs. First of all, (Question 1)

I DON'T KNOW ANYTHING ABOUT IT.

That's one of the things we want to find out. Your opinions are valuable to us. By giving us just a couple of minutes of your time you can help us improve the high school programs. First of all, could you tell me, (Question 1)

WHY ARE YOU CALLING ME?

You were selected by your telephone number. You are one of a sample of people we are calling in the community to find out community opinion. Now, could you tell me, (Question 1)

WHAT DO YOU WANT TO KNOW?

Well, first of all, (Question 1)

I DON'T HAVE TIME.

This survey will take less than two minutes. Your opinions are valuable to us, and you can help us to improve Georgia's high school programs. Now, could you tell me, (Question 1)

October 1979

(Col 1) 6 TELEPHONE SURVEY: CLUSTER STUDY

High School ______________________________ Respondent # _____
(Col 2,3)

1. Do you have any children of your own who attend ______________ High School?

(Col 4) ____(1) Yes

____(2) No (a) Do you have any grandchildren, nieces, nephews, cousins, or other relatives who attend ____________ High School or do you know any children who go there?

(Col 5) ____ (1) Yes

____ (2) No

2. Did you know that ______________ High School has a vocational program for training students in job skills?

(Col 6) ____(1) Yes: Have you ever known a student who took vocational training at ____________ High School?

(Col 7) ____ (1) Yes ____ (2) No

____(2) No

3. Do you think that all students should learn some job skill before they graduate from high school?

(Col 8) ____(1) Yes ____ (2) No ____ (3) Don't know

4. For those high school students who take vocational training, do you think they will be better able to find a good job if they learn a lot about one skill or if they learn as much as they can about several different skills?

(Col 9) ____(1) One skill ____(3) Don't know

____(2) Several skills

5. Do you think that most graduates of __________ High School will be able to find a good job within driving distance of home, or do you think they will have to move out of the community to find work?

(Col 10) ____(1) Within driving distance

____(2) Will have to move out of the community

____(3) Don't know

6. Do you think that students who graduate from the vocational program at _______________ High School will have the skills they need to find a good job?

(Col 11) ____(1) Yes
____(2) No
____(3) Don't know

7. Do you think that most students want to find a job when they graduate from high school?

(Col 12) ____(1) Yes
____(2) No
____(3) Don't know

8. In general, do you think high school programs are better, worse, or about the same today as when you were in school?

(Col 13) ____(1) Better
____(2) Worse
____(3) About the same
____(4) Don't know

9. What is the single biggest problem you think Georgia's high schools have today?

(Col 14,15) ____

10. If you could recommend one thing to improve the education of Georgia's high school students, what would you recommend?

(Col 16,17) ____

THAT'S ALL THE QUESTIONS I HAVE. THANK YOU VERY MUCH FOR YOUR HELP. GOODBYE.

Table 3.6

TELEPHONE SURVEY SAMPLE

Cluster Study 1979

SCHOOL	CITY	Sample Size	Alternate	Total Names
Region I				
Cherokee High School	Canton	6	6	12
DeKalb Occ. Ed. Center	Cham., Drvl., Dun.,	17	17	34
Forest Park High School	Forest Park	13	13	26
Haralson County High School	Tallapoosa	9	9	18
Henry County High School	McDonough	14	14	28
Monroe Comp. High School	Monroe	5	5	10
Paulding Co. Comp. H.S.	Dallas	6	6	12
Rossville High School	Rossville	8	8	16
Region II				
Cedar Shoals High School	Athens	10	10	20
North Hall High School	Gainesville	9	9	18
Stephens County High School	Toccoa	13	13	26
Washington Co. Career Cntr.	Sandersville	7	7	14
White Cnty. Vocational H.S.	Cleveland	9	9	18
Region III				
Appling County High School	Baxley	3	3	6
Bacon County High School	Alma	4	8	8
Bradwell Institute	Hinesville	19	19	38
Region IV				
Albany Vocational High School	Albany	10	10	20
Crisp County High School	Cordele	6	6	12
Early County High School	Blakely	13	13	26
Randolph County High School	Cuthbert	4	4	8
		185	185	370

Survey of Vocational Supervisors

The original design called for the survey of all secondary vocational supervisors during their attendance at the GVA/In Service activities in August. The development of the questionnaire and the scheduling of activities were geared toward that expectation. However, because of the low attendance by supervisors at the scheduled activities, a mail out procedure was also used after GVA.

Development of the Vocational Supervisor Questionnaire

Using established development and review procedures a questionnaire was developed by the project staff which contained items designed to collect data in a number of different categories, including the following.

1. Knowledge and belief in the principles of the cluster concept.
2. Perceptions of classroom teaching practices.
3. Perceptions of administrative and community support.
4. Perceptions of student skill and work attitude preparedness.
5. Perceptions of probable student career success.
6. Perceptions of student career goal orientation.
7. Perceptions of program articulation.
8 Perceptions of practices regarding individualized instruction.
9. Academic and related work experience.

Items on the questionnaire were designed as a positive or negative statement along a continuum. This method produced responses which automatically indicated the presence or absence of possible problems of policy or practice. Items which were left blank were interpreted as neutral or "don't know" responses.

Conducting the Vocational Supervisor Survey

Arrangements were made to survey the secondary vocational supervisors during their GVA/In-service activities at a scheduled meeting on August 10, 1979. Out of a total population of vocational supervisors statewide of approximately 125, 85 (68%) completed and returned questionnaires at the August 10 meeting. This response rate was not as high as expected and was unacceptably low considering the integral part the supervisors play in the operation of the cluster programs. A follow-up effort was launched by mail in conjunction with the vocational teacher survey with the goal of increasing the supervisor response rate. Supervisors who requested questionnaires for their teachers (Please see the Vocational Teacher Survey section of this report for details on how this process was carried out.) were also sent a supervisor's questionniare. As a result an additional 14 completed supervisor questionnaires were received, bringing the total supervisor response to 99 by the September 30 cut-off date. This represents a final response rate of 79%.

The Vocational Supervisor survey instrument along with the follow-up letters appear on pages III-61 through III- 68.

VOCATIONAL SUPERVISOR SURVEY: VOCATIONAL CLUSTER STUDY

Conducted by the Department of Education of the
State of Georgia and The University of Georgia

Dear Supervisor:

You are in a unique position to provide some very valuable and necessary information to the State Department of Education. This survey is a critical part of an important study of the high school vocational programs in Georgia. The information you can provide will enable us to evaluate the success of our programs. No information is asked that can identify you or your school. Please give us your complete and honest answers so that these survey results will accurately reflect your point of view.

Thank you for your help.

For the following set of questions please indicate your agreement or disagreement with each statement as it applies to your students and your program by placing a check in either the Agree or Disagree column after each item.

	Agree	Disagree
1. Many of our students are not ready to make a realistic permanent career choice before they graduate from high school.	___	___
2. The job market for most of our graduates will be in a state of change throughout their employment careers.	___	___
3. I believe that the best way to prepare a student for employment is to teach him or her as much as we can about one or two skills in-depth.	___	___
4. Most of our graduates will continue their vocational training after high school.	___	___
5. Many of our students are in vocational classes for non-career reasons such as hobbies, etc.	___	___
6. If it were not for vocational courses, many of our students would drop out of school.	___	___
7. The school counseling staff and the vocational department work closely in coordinating each student's program.	___	___
8. Students who do well in academic subjects are generally steered away from our vocational program.	___	___
9. Most of our students will find jobs in the area of their training or in a related field.	___	___
10. Most of our students will probably change careers at least four or five times during their lifetime.	___	___
11. I believe that the best training for our students is to teach them a broad range of related basic job skills.	___	___

	Agree	Disagree
12. Many of our graduates will not be able to find a job that pays a decent livable wage.	___	___
13. I believe that the cluster type curriculum is the best preparation for our students.	___	___
14. It is my belief that the cluster approach to vocational education in Georgia's high schools will be discontinued.	___	___
15. We don't have enough equipment to operate our programs properly.	___	___
16. Most of our equipment and tools are new and in good condition.	___	___
17. Many of our classes are really too large for the kind of teaching that has to be done.	___	___
18. The vast majority of our students are very serious about learning the job skills necessary for successful employment.	___	___
19. Many of the students in our classes are not developing the proper attitudes for successful employment.	___	___
20. Many of the students in our classes don't know or care about doing high quality work.	___	___
21. Our classes are sometimes used as a dumping ground for problem students and troublemakers in order to get them out of the regular academic classes.	___	___
22. Our principal understands and supports the proper purpose and operation of the vocational program.	___	___
23. In general I am very pleased with the cooperation and support I get from my principal.	___	___
24. I don't feel that the Board of Education gives enough support to our vocational program.	___	___
25. I feel as though the State Department of Education sometimes fails to keep me informed of the latest state or federal policies that affect my program.	___	___
26. The policies that do come from the State Department of Education are often unclear or inconsistent with other policies.	___	___
27. When I do receive new state or federal policies I feel as though I should pass them along to the teachers who are affected.	___	___
28. For the most part our students' parents show great interest in the vocational program.	___	___

	Agree	Disagree
29. I take special steps to try to develop interest for our programs among local employers.	___	___
30. During the last year I had local business or community leaders come to talk to my students about the importance of vocational education.	___	___
31. Some local businesses donate equipment, tools or materials to our programs.	___	___
32. Many local employers are interested in having our students work in their business on a part-time or co-op basis.	___	___
33. Local employers play a key role in helping us determine the skills to be taught in our classes.	___	___
34. There are enough jobs within a fifty mile radius for most of our graduates to find suitable employment in the area of their training.	___	___
35. I work closely with the post-secondary programs in our area to coordinate our course content with their vocational programs.	___	___
36. We work closely with the academic teachers to coordinate the content of our vocational classes with the content of the students' academic courses.	___	___
37. Some of our students can not do the reading required for successful employment in the area of their training.	___	___
38. Some of our students can not do the math required for successful employment in the area of their training.	___	___
39. We teach that the proper attitudes about work, such as coming to work on time, accepting responsibility, getting along with other employees, following company policies, etc., are just as important as teaching the actual job skills.	___	___
40. I believe that individualized instruction is the best way to conduct our classes.	___	___
41. I believe that the best way for my teachers to teach is for them to teach those skills they know best and not try to teach skills they don't feel comfortable with.	___	___
42. We give all our students a pretest when they first come into each course to determine where to start them in the instructional sequence.	___	___
43. We use prepackaged individualized materials that were purchased for our programs.	___	___

	Agree	Disagree
44. We have prepared our own individualized materials for use in some of our classes.	___	___
45. There are individualized teaching materials available at our school that are not being used.	___	___
46. Some of my teachers don't have the necessary skills to conduct individualized instruction.	___	___
47. Some of our classroom arrangements are not conducive to individualized instruction.	___	___
48. My teachers don't have enough time to do everything that is required in using the individualized approach to instruction.	___	___
49. Our classes are too large to completely individualize instruction.	___	___
50. I do not have sufficient budget to purchase the textbooks and other materials necessary to individualize instruction.	___	___

51. Please indicate the vocational subjects in your program that are taught as a cluster curriculum. (check all that apply)

__(1)Agriculture
__(2)Business and Office Occ.
__(3)Conservation, Recreation, and Wildlife
__(4)Construction
__(5)Cosmetology
__(6)Drafting and Design
__(7)Electro-Mechanics
__(8)Electronics
__(9)Food Services
__(10)Forestry
__(11)Graphic Arts
__(12)Health Occupations
__(13)Horticulture
__(14)Marketing and Distributive Ed.
__(15)Metal Fabrication
__(16)Transportation
__(17)Other ______________________________

____

52. If you are offering any single skills subjects in your program that are not taught as part of a cluster curriculum, please list those subjects below.

______________________________ ______________________________

______________________________ ______________________________

______________________________ ______________________________

______________________________ ______________________________

______________________________ ______________________________

53. How long have you been a vocational supervisor in Georgia's public high schools? _______ Years.

54. What is the highest level work experience in business, industry, etc. you have had in actually performing the job skills that are taught in your program?

Years	Type of Work and Level (Apprentice, Journeyman, Specialist, etc.)
____	____
____	____

55. What previous experience have you had in a supervisory capacity?

____

____

56. What was the last position you held before taking your current position?

____

57. Have you had any formal instruction in any of the following areas since you became a vocational supervisor?

Yes	No		Was the training adequate? Yes	No
__	__	(1) Supervisory skills	__	__
__	__	(2) Individualized instruction	__	__
__	__	(3) Vocational clusters	__	__
__	__	(4) Task analysis	__	__
__	__	(5) Job market surveys	__	__
__	__	(6) The function and use of Advisory Committees .	__	__
__	__	(7) State and federal policies that affect your program	__	__

58. Please make any comments you may have about the cluster programs, Georgia's high school vocational education, individualized instruction, or any other issues raised by this survey:

____

____

____

____

____

____

THANK YOU.

THE UNIVERSITY OF GEORGIA
COLLEGE OF EDUCATION
DIVISION OF VOCATIONAL EDUCATION
VOCATIONAL EDUCATION MATERIALS CENTER
GREEN STREET
ATHENS, GEORGIA 30602

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VOCATIONAL EDUCATION MATERIALS CENTER

September 11, 1979

To: All Georgia secondary vocational supervisors

From: George L. O'Kelley, Jr.; Chairman

Dear Supervisor:

Allow me to express to you, on behalf of all the staff here, our appreciation for the assistance and support that many of you have provided to the statewide vocational cluster study that has been under way for the past six and one-half months. It is in great part due to your cooperation that we have been able to make significant progress and keep the project on schedule.

An important part of the study is a survey of secondary vocational teachers. During the August GVA/in-service activities packets of survey forms were given out to those of you in attendance for distribution to your vocational teachers. To date we have received only a small percentage of those completed questionnaires, and we have only a few weeks left in the study.

If you did not receive a packet of forms or if you have misplaced your packet, please call us collect (404) 542-4592 and ask for Charles Connor, or mail back the enclosed notice to receive a supply of forms for your teachers.

We need your help in getting these forms returned. Let me ask you personally to check with your teachers who received the questionnaires to be sure that they are completed and returned to us. The State Department of Education and the General Assembly will be looking at these survey results; therefore they must be as complete as possible.

I know we can count on you in this one final effort.

GLO/cc

Enclosure

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION INSTITUTION

VOCATIONAL CLUSTER STUDY

Attention: Charles Connor

Supervisor Name: ______________________________

School Address: ______________________________

____

____

( ) My teachers have completed and returned the cluster study survey forms.

( ) I need a supply of survey forms for my vocational teachers. Please send them at once.

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VOCATIONAL EDUCATION MATERIALS CENTER

September 17, 1979

To: Georgia Secondary Vocational Supervisors

From: Charles Connor, Cluster Project Analyst

Dear Supervisor:

Thank you for your response to Dr. O'Kelley's memo regarding the need for teacher response to the cluster study survey. We are surveying a sample of teachers from each secondary school program. I have enclosed five copies of the teacher survey form for your school. Please distribute the surveys to any five of your vocational teachers, giving preference to cluster teachers first, and then single skills teachers if you have any survey forms left.

We would be grateful for your assistance in having these survey forms completed and returned as soon as possible. They take about 15 minutes to complete.

I have also enclosed a vocational supervisor's survey form for you in case we missed you at GVA.

Let me stress the importance and urgency of this matter and express our appreciation for your assistance.

CC/hp

Enclosure

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION INSTITUTION

Survey of Secondary Vocational Teachers

During field testing and survey of current students in the classroom it was observed that variation in classroom procedures and curriculum content among teachers was a major variable in the cluster program. In order to assess the impact of this variation on cluster program functioning it was deemed necessary to measure the variation through a survey of teacher attitudes and practices.

Development of the Vocational Teacher Survey Instrument

The instrument developed for the survey of secondary vocational teachers is a close parallel to the Vocational Supervisor questionnaire. The only difference is that the items are stated in a manner designed to measure the teachers' perspective. As in the Supervisor questionnaire responses were made anonymous in order to increase the validity and the rate of responses. The Teacher questionnaire appears on pages III-72 through III-76.

Conducting the Survey of Teachers

The initial design called for the survey of secondary vocational teachers at the GVA/In-service activities in Atlanta during August 7-10 where 700-900 teachers were expected to be in attendance. This figure represented approximately two-thirds of the total secondary vocational teachers statewide. On August 7, 1979, questionnaires were distributed to all T and I instructors in attendance at the scheduled meetings. It was discovered during the time period allotted for the questionnaire completion that post secondary instructors were present in the meeting and were completing questionnaires. Teachers were asked to indicate on the front page of the survey form whether they were secondary or post-secondary. Review of the completed questionnaires revealed that 84 completed forms were received from secondary T and I teachers. This response rate was about 10% of what had been expected.

On August 8, 1979, surveys were completed by 40 secondary Health Occupations teachers in attendance at a scheduled workshop at the GVA/In-service. These forty surveys represented about two-thirds of the expected response rate for Health Occupations teachers.

Because of the light attendance by T and I teachers at the August 7 meeting, the decision was made to distribute teacher questionnaires to the vocational supervisors who were scheduled to meet on August 10. On that date packets of teacher questionnaires were given out to the secondary vocational supervisors for distribution to the vocational teachers at their schools. Each packet contained five teacher survey forms, each with a cover letter and a postage paid return mail envelope. (A copy of the cover letter appears on page III-77.) A total of 425 teacher questionnaires were distributed to 85 vocational supervisors in attendance.

Mail Follow-up of Vocational Teacher Survey

By September 1, 93 of the teacher surveys distributed to vocational supervisors had been completed and returned. Because of this light response rate the decision was made to conduct a follow-up by mail. The first step was a follow-up letter to all vocational supervisors (See page III-68.) This letter had the dual purpose of (1) urging those supervisors who had received teacher questionnaires at GVA/In-service during August to assist in getting their teachers to respond, and (2) identifying those supervisors who had not received questionnaires for their teachers. A total of 78 supervisors responded to this letter by returning the reply form or calling. Thirty-nine supervisors indicated that their teachers had completed and returned their questionnaires, and thirty-nine supervisors requested that questionnaires be sent for their teachers. As a result of these requests, 195 teacher questonnaires were mailed out during September. By the September 30 cutoff date for data processing, 397 secondary vocational teacher surveys were available for processing. This figure represents 54% of all teacher surveys distributed. (See pages III-66 through III-68 for copies of the follow-up documents.)

VOCATIONAL TEACHER SURVEY: VOCATIONAL CLUSTER STUDY

Conducted by the Department of Education of the
State of Georgia and The University of Georgia

Dear Teacher:

You are in a unique position to provide some very valuable and necessary information to the State Department of Education. This survey is a critical part of an important study of the high school vocational programs in Georgia. The information you can provide will enable us to evaluate the success of our programs. No information is asked that can identify you or your school. Please give us your complete and honest answers so that these survey results will accurately reflect your point of view.

Thank you for your help.

For questions 1-48 please indicate your agreement or disagreement with each of the statements as they apply to your students and your program by placing a check in either the Agree or Disagree column after each item.

	Agree	Disagree
1. Many of my students are not ready to make a realistic permanent career choice before they graduate from high school.	___	___
2. The job market for most of my graduates will be in a state of change throughout their employment careers.	___	___
3. I believe that the best way to prepare my students for employment is to teach them as much as I can about one or two skills in-depth.	___	___
4. Most of my graduates will continue their vocational training after high school.	___	___
5. Many of my students are in my classes for non-career reasons such as hobbies, etc.	___	___
6. If it were not for vocational courses, many of my students would drop out of school.	___	___
7. The school counseling staff and I work closely in coordinating each student's program.	___	___
8. Students who do well in academic subjects at my school are steered away from vocational education.	___	___
9. Most of my students will find jobs in the area of their training or in a related field.	___	___
10. Most of my students will probably change careers at least four or five times during their lifetime.	___	___
11. I believe that the best training for my students is to teach them a broad range of related basic job skills.	___	___

	Agree	Disagree
12. Many of my graduates will not be able to find a job that pays a decent livable wage.	___	___
13. I believe that the cluster type curriculum is the best preparation for my students.	___	___
14. I would teach more job skills if I had more equipment.	___	___
15. Most of my equipment and tools are new and in good condition.	___	___
16. My classes are really too large for the kind of teaching I have to do.	___	___
17. The vast majority of my students are very serious about learning the job skills necessary for successful employment.	___	___
18. Many of the students in my classes are not developing the proper attitudes for successful employment.	___	___
19. Many of the students in my classes don't know or care about doing high quality work.	___	___
20. My classes are sometimes used as a dumping ground for problem students and troublemakers in order to get them out of the regular academic classes.	___	___
21. My principal understands and supports the proper purpose and operation of the vocational program.	___	___
22. My vocational supervisor gives me the responsibility of deciding what to teach and how to teach my courses.	___	___
23. My vocational supervisor sometimes fails to keep me informed of relevant state and federal policies that affect my program.	___	___
24. In general I am very pleased with the support and cooperation I get from my vocational supervisor.	___	___
25. I do not feel that the Board of Education gives enough support to our vocational program.	___	___
26. Most of my students' parents apparently don't have any real interest in the vocational program.	___	___
27. I take special steps to try to develop interest for my programs among local employers.	___	___
28. During the last year I had local business or community leaders come to talk to my students about the importance of vocational education.	___	___
29. Some local businesses donate equipment, tools or materials to my program.	___	___

	Agree	Disagree
30. Local businessmen give my program special rates for the purchase of materials used in my classes.	___	___
31. Many local employers are interested in having my students work in their business on a part-time or co-op basis.	___	___
32. There are enough jobs within a fifty mile radius for most of my graduates to find suitable employment in the area of their training.	___	___
33. I work closely with post secondary programs in our area to coordinate my course content with their vocational programs.	___	___
34. We have no coordination between the content of my courses and the content of the students' academic classes.	___	___
35. Some of my students can not do the reading required for successful employment in the area of their training.	___	___
36. Some of my students can not do the math required for successful employment in the area of their training.	___	___
37. I believe that teaching the proper attitudes about work, such as coming to work on time, accepting responsibility, getting along with other employees, following company policies, etc., is just as important as teaching the actual job skills.	___	___
38. I find that individualized instruction is one of the best ways to conduct my classes.	___	___
39. I believe that the best way for me to teach is to teach those skills I know best and not try to teach things I don't feel comfortable with.	___	___
40. I give my students a pretest when they first come into a course to determine where to start them in the instructional sequence.	___	___
41. I use prepackaged individualized materials that were purchased for the program in teaching my courses.	___	___
42. I have prepared my own individualized materials for teaching my classes.	___	___
43. There are individualized teaching materials available at our school that I don't use in my classes.	___	___
44. My classroom arrangement is not conducive to individualized instruction.	___	___
45. I don't have enough time to do everything that is required to use the individualized approach in my classes.	___	___

	Agree	Disagree
46. My classes are too large to completely individualize instruction in my classes.	___	___
47. I do not have sufficient budget to purchase the textbooks and other materials necessary to individualize instruction in my classes.	___	___
48. It is my belief that the cluster approach to vocational education in Georgia's high schools will be discontinued.	___	___

49. What is the area of vocational education that you teach? (check all that you teach)

__(1)Construction
__(2)Cosmetology
__(3)Drafting
__(4)Electro-Mechanics
__(5)Electronics
__(6)Graphic Arts
__(7)Health Occupations
__(8)Metal Fabrication
__(9)Transportation
__(10)Other ______________________

50. Are the courses you teach organized according to the cluster approach or the single skills approach? (check one)

__(1)Cluster Approach
__(2)Single Skills Approach
__(3)Some of both
__(4)Don't know

51. If you checked (2), (3), or (4) in question 50, please list the courses that you teach.

______________________ ______________________

______________________ ______________________

______________________ ______________________

52. How long have you been a vocational instructor in Georgia's public high schools? _____ Years.

53. What type of teaching certificate do you hold? _____.

54. How long have you held your present certificate? ____________________.

55. Do you plan future education? ___Yes ___No
If yes, what type?

__(1)Higher certificate
__(2)College degree
__(3)Graduate degree
__(4)Other ____________________________

56. What is the highest level work experience in business, industry, etc., you have had in the subject areas that you are teaching?

Years Type of Work and Level (Apprentice, Journeyman, Specialist, etc.)

_____ ____.

57. Have you had any formal instruction in any of the following areas since you became a vocational instructor?

Yes No
__ __ (1)Individualized instruction
__ __ (2)Vocational clusters
__ __ (3)The use of audio visuals
__ __ (4)The use of prepackaged instructional materials
__ __ (5)Teaching methods

58. Do you frequently use audio-visuals in your classes? __(1)Yes __(2)No

59. Please indicate previous teaching experience that you had before becoming a vocational instructor in Georgia's public high schools.

__(1)None
__(2)High school vocational instructor elsewhere
__(3)Secondary academic instructor
__(4)Elementary teacher
__(5)Post-secondary vocational instructor
__(6)Other ____

60. Please make any comments you may have about the cluster programs, Georgia's high school vocational education, or any other issues raised by this survey:

Please check below the category for the type of high school in which you teach.
__(1) Comprehensive High School
__(2) Area Vocational High School
__(3) Career Education Center
__(4) Regular High School
__(5) Other ________________________________

THANK YOU

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September 17, 1979

To: All Georgia Secondary Vocational Teachers

From: George L. O'Kelley, Jr., Chairman

Dear Teacher:

I am contacting you to ask your assistance in determining the future of vocational education in Georgia. You are in a position to provide valuable, necessary information that no other person can provide. That information stems from your personal daily involvement with secondary vocational programs.

The survey form that you will find inclosed with this memorandum is part of an important statewide assessment of the effectiveness of Georgia's high school vocational programs. The Study is being conducted by the State Department of Education and The University of Georgia and has been mandated by the Georgia General Assembly. Your responses to this survey are very important to us in accurately evaluating the success of the programs.

No information is being asked that will identify you or your school. Please take about 15 minutes today to complete the survey form and return it in the postage paid envelope.

Thank you for your assistance in this very important project.

GLO/cc

Enclosure

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION INSTITUTION

Survey of State Vocational Staff

A questionnaire was developed for the survey of State vocational staff which was an adaptation of the forms used to survey secondary vocational teachers and supervisors. A copy of the instrument appears on pages III-79 through III-83 . Arrangements were made to survey all State vocational staff members in attendance during the State Department of Education staff meeting in Athens on September 24 and 25. At that time questionnaires were completed by forty-nine state vocational staff. These represent all but two or three of the appropriate State staff.

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STATE STAFF SURVEY: VOCATIONAL CLUSTER STUDY

Conducted by the Department of Education of the
State of Georgia and The University of Georgia

For the following set of questions please indicate your agreement or disagreement with each statement as it applies to your program by placing a check in either the Agree or Disagree column after each item.

	Agree	Disagree
1. Many of our students are not ready to make a realistic permanent career choice before they graduate from high school.	___	___
2. The job market for most of our graduates will be in a state of change throughout their employment careers.	___	___
3. I believe that the best way to prepare a student for employment is to teach him or her as much as we can about one or two skills in-depth.	___	___
4. Most of our graduates will continue their vocational training after high school.	___	___
5. Many of our students are in vocational classes for non-career reasons such as hobbies, etc.	___	___
6. If it were not for vocational courses, many of our students would drop out of school.	___	___
7. As a general rule, school counseling staffs and vocational departments work closely in coordinating each student's program.	___	___
8. Students who do well in academic subjects are generally steered away from vocational programs in many of our schools.	___	___
9. Most of our students will find jobs in the area of their training or in a related field.	___	___
10. Most of our students will probably change careers at least four or five times during their lifetime.	___	___
11. I believe that the best training for our students is to teach them a broad range of related basic job skills.	___	___
12. Many of our graduates will not be able to find a job that pays a decent livable wage.	___	___
13. I believe that the cluster type curriculum is the best preparation for our students.	___	___

	Agree	Disagree
14. It is my belief that the cluster approach to vocational education in Georgia's high schools will be discontinued.	___	___
15. Many schools don't have enough equipment to operate their vocational programs properly.	___	___
16. Most of our equipment and tools are new and in good condition.	___	___
17. Many of our classes are really too large for the kind of teaching that has to be done.	___	___
18. The vast majority of our students are very serious about learning the job skills necessary for successful employment.	___	___
19. Many of the students in our classes are not developing the proper attitudes for successful employment.	___	___
20. Many of the students in our classes don't know or care about doing high quality work.	___	___
21. Our classes are sometimes used as a dumping ground for problem students and troublemakers in order to get them out of the regular academic classes.	___	___
22. Most principals understand and support the proper purpose and operation of their vocational program.	___	___
23. In general, I am very pleased with the cooperation and support our secondary programs get from principals.	___	___
24. In general, I don't feel that the Boards of Education give enough support to our vocational programs.	___	___
25. I feel as though the State Department of Education sometimes fails to keep local administrators adequately informed of the latest state or federal policies that affect their programs.	___	___
26. The policies that do come from the State Department of Education are often unclear or inconsistent with other policies.	___	___
27. For the most part, our students' parents show great interest in the vocational programs.	___	___
28. Most of our secondary programs take special steps to try to develop interest for our programs among local employers.	___	___
29. Many local businesses donate equipment, tools, or materials to our programs.	___	___

	Agree	Disagree
30. Many local employers are interested in having our students work in their business on a part-time or co-op basis.	___	___
31. Local employers play a key role in helping determine the skills to be taught in the classroom.	___	___
32. There are enough jobs within a fifty mile radius for most of our graduates to find suitable employment in the area of their training.	___	___
33. In general, secondary programs work closely with the post-secondary programs to coordinate course content between their vocational programs.	___	___
34. In general, vocational staff work closely with the academic teachers to coordinate the content of vocational classes with the content of the students' academic courses.	___	___
35. Many of our students can not do the reading required for successful employment in the area of their training.	___	___
36. Many of our students can not do the math required for successful employment in the area of their training.	___	___
37. I believe that teaching the proper attitudes about work, such as coming to work on time, accepting responsibility, getting along with other employees, following company policies, etc., is just as important as teaching the actual job skills.	___	___
38. I believe that individualized instruction is the best way to conduct secondary vocational courses.	___	___
39. I believe that the best way for teachers to teach is for them to teach those skills they know best and not try to teach skills with which they don't feel comfortable.	___	___
40. All students should be given a pretest when they first come into each course to determine where to start them in the instructional sequence.	___	___
41. Most of our classes use prepackaged individualized materials that were purchased for our programs.	___	___
42. Many teachers prepare their own individualized materials for use in their classes.	___	___
43. There are individualized teaching materials available at many schools that are not being used.	___	___
44. Many vocational teachers don't have the necessary skills to conduct individualized instruction.	___	___

	Agree	Disagree
45. Many of our classroom arrangements are not conducive to individualized instruction.	___	___
46. Teachers don't have enough time to do everything that is required in using the individualized approach to instruction.	___	___
47. In general, classes are too large to completely individualize instruction.	___	___
48. Programs don't have sufficient budget to purchase the textbooks and other materials necessary to individualize instruction.	___	___

49. Please indicate in the following list your areas of vocational specialty. (Check all that apply).

__(1) Agriculture
__(2) Business and Office Occ.
__(3) Conservation, Recreation and Wildlife
__(4) Construction
__(5) Cosmetology
__(6) Drafting and Design
__(7) Electro-Mechanics
__(8) Electronics
__(9) Food Services
__(10) Forestry
__(11) Graphic Arts
__(12) Health Occupations
__(13) Horticulture
__(14) Marketing and Distributive Ed.
__(15) Metal Fabrication
__(16) Transportation
__(17) Other ____________________
____

50. Please indicate below any teaching experience that you have had in the area of your specialty.

Years	Level and vocational area
___	___________________________
___	___________________________

51. What is the highest level of work experience in business, industry, etc. that you have had in actually performing the job skills that are taught in the area of your specialty?

Years	Type of work and level (Apprentice, Journeyman, Specialist, etc.)
___	___________________________
___	___________________________

52. How long have you been a vocational administrator? ____________

53. What was the last position you held before taking your current position?

____

____

54. What is the highest educational degree that you hold?

Degree	Year	Major
______	____	____

55. Have you had any formal instruction in any of the following areas since you became a vocational administrator?

			Was the training adequate?	
Yes	No		Yes	No
__	__	(1) Vocational Administration	__	__
__	__	(2) Individualized Instruction	__	__
__	__	(3) Vocational Clusters	__	__
__	__	(4) Task Analysis	__	__
__	__	(5) Job Market Surveys	__	__
__	__	(6) The function and use of Advisory Committees .	__	__
__	__	(7) State and federal policies that affect your programs	__	__

56. Please make any comments you may have about the cluster programs, Georgia's high school vocational education, individualized instruction, or any other issues raised by this survey:

____

____

____

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____

____

THANK YOU

Data Control and Processing

The conducting of the eight surveys in this study involved the generation of over 8,000 separate forms and individual pieces of correspondence. From these there were 3,483 usuable completed questionnaires received from survey respondents. At any one time there were as many as ten project staff members in the field collecting data in twenty sample schools, and four clerical and data processing staff working simultaneously. This large an effort required the establishment of detailed and rigorous procedures to manage and control the flow of forms and the processing of data.

Data Control

For each of the eight surveys a checklist was constructed listing all survey activities in the sequence of their projected occurrence. Timelines and manpower needs were estimated and scheduled. Using these schedules as a base, all survey instruments, cover letters, correspondence, interview schedules, etc., were prepared as far in advance as possible. For correspondence and mailed survey instruments, log books were kept listing the name and address of the respondent, the date of mailing, the date of reply, and all follow-up efforts. (See page III-86 for an example of one log used.) For all directly administered questionnaires logs were maintained and completed instruments were stored in clearly labelled boxes. Address labels were used as the means for identifying individual respondents in the log book. Whenever a sample replacement was made a new address label was inserted in the log book.

Data Processing

For all surveys except the telephone survey, data processing staff transferred survey responses onto blank IBM machine-readable answer sheets. The completed code sheets were read by scanner and converted to punch cards for analysis. A master code book was constructed in duplicate to cross reference each survey item response with its corresponding code sheet location and punch card code. Data analysis was conducted through the Educational Research Laboratory and the Computer Center of the University of Georgia. Frequencies, percentages, and basic cross tabulations of items within survey populations were computed using the Statistical Package for the Social Sciences (SPSS). Comparison of parallel items between survey populations was performed using the Statistical Analysis System (SAS). Chi Square at the .05 level was used as the test for significance.

For the telephone survey, frequencies and percentages were computed manually, as were comparisons for sex differences in the graduate responses.

Survey Data Control

CLUSTER STUDY

Population: ____________________

Respondent	Inq. Rcd.	Sur. Snt.	Follow-Up		Sur Rcd	School	EM (1)	MF (2)	C (3)	T (4)	H (5)
			Ltr.	Call							

SECTION IV

PRESENTATION OF THE FINDINGS

Introduction

This chapter contains a presentation of the data resulting from the eight surveys that were conducted for this study. Each of the eight survey forms is included intact and the percentage distribution of responses to each survey item has been printed next to each response category. For a few items means were computed instead of percentages and have been so indicated. Wherever it was felt that the raw data needed some discussion or further analysis for clarification, such discussion and analysis have been included.

The Graduate Survey

Regional Representation

The random sample of graduates for the survey was drawn from a census of the graduate population of cluster students supplied by randomly selected schools from the four OVE planning regions. The sample was stratified so that each of the four regions would be represented in the survey in a proportion equal to the number of their graduates. As Table 4.1 illustrates, the regional distribution of the graduates who responded to the graduate survey closely parallels the distribution of graduates in the graduate census supplied by the participating schools. This proportional response by the graduates means that no region was disproportionately represented in the survey results.

Table 4.1
Regional Distribution of the Graduate Population

Region	Graduate Census	Sample Return
I	41%	42%
II	24%	29%
III	13%	12%
IV	22%	17%
Total:	100%	100%

Year of Graduation

Another requirement of the graduate survey was that it reflect two separate categories of graduates, those who graduated in the years 1970-1974, and those who graduated in 1975-1976. Table 4.2 shows a comparison between those graduates who responded to the survey and the graduates in the census from which the sample was drawn. As can be seen, the sample return is not significantly different from the graduate census. There is a slightly heavier return for the years 1975-1976, but this is to be expected since the graduates from the earlier years would naturally be harder to locate. This slight skewing had no effect on the results, as later analysis demonstrated.

Table 4.2
Distribution of Graduates
by Year of Graduation

Year of Graduation	Graduate Census	Sample Return
1970-1974	43%	36%
1975-1976	57%	64%
Total:	100%	100%

Years of Training

A central concern at the beginning of the study was that the graduates be divided into two groups, those who had completed one year of cluster training, and those who had completed two or more years of training. The graduate census did not allow for a stratification of the sample because of inadequacies in the detail of graduates' records. Although all schools in-

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dicated on the census the amount of training for each graduate, no amount of confidence could be placed on the accuracy of the stated amount. The sample drawn was random in regard to length of time in the cluster program. The distribution by years of study appears in Table 4.3.

Table 4.3
Distribution of Graduates by Years of Training

Years of Training	Graduate Census	Sample Return
1 Year	63%	50%
2 or more	37%	50%
Total:	100%	100%

It is believed that the sample return more accurately represents the graduate population percentages than does the graduate census. Later analysis showed that this dimension proved inconsequential to the results.

Survey Items

The questionnaire used in surveying graduates of the cluster programs appears on pages IV-15 and V-20. The actual frequency distribution of responses in percentages is indicated for each item on the questionnaire. The following pages present a discussion of some of those items.

Field of Study

Table 4.4 shows that the sample response among graduates in the five clusters is a close parallel to the census population. There was a higher response from graduates in the "Multiple Clusters" category, but this is thought to result from an under-reporting for this category in the graduate census. A hand tabulation of respondents was conducted by name of respondent to check for possible sex bias in the response rates. This analysis showed that 17% of the graduates in the census were female. Further analysis showed that 7% of the females in the census were trained in occupational areas not traditionally

Table 4.4
Graduate Distribution by Field of Study

Field of Study	Graduate Census	Sample Return
Electro-Mechanics	19%	16%
Metal Fabrication	19%	14%
Construction	16%	18%
Transportation	22%	18%
Health Occupations	17%	17%
Multiple Clusters	8%	16%
Total:	100%	100%

held by women, and 11% of the female respondents were trained in non-traditional areas. In summary, females were represented in the survey respondents in the same proportions that they appeared in the graduate census. There was no sex bias in the sample response rates.

Item 1 - Employment Status

Item 1 indicates that 95% of the graduates are still in the labor force. Of the 5% who are out of the labor force, the breakdown is shown in table 4.5. In addition, as item 22 indicates, 13% of the graduates included in Item 1 are currently enrolled in post-secondary Vocational-Technical school, junior college, or college. Some of those students are employed part-time and some are unemployed.

Table 4.5
Breakdown of Cluster Graduates Not in the Labor Force

Homemaker	1%
Poor Health	1%
Unspecified	3%
Total:	5%

As a further check for sex bias in the responses, females were compared with males on employment status. The analysis showed 95% of the female respondents still in the labor force, the same rate as for males. Of the females in the labor force, 78% are employed, 19% are unemployed but looking (all have worked), and 4% are in school. These figures are not significantly different from the status for males.

Current employment status reflects the influence of not only high school vocational education, but also the effects of intervening influences since high school. Table 4.6, for example, shows a comparison of graduates who have had secondary-only training with graduates who have attended post-secondary vocational - technical school, junior college, or college.

Table 4.6

Employment Status of Graduates With Secondary Only and Post-Secondary Training

Secondary Only	Post-Secondary	Employment Status
82%	65%	(1) Full-time
1%	18%	(2) Part-time
3%	3%	(3) Self-employed
10%	10%	(4) Unemployed - Looking
3%	5%	(5) Unemployed - Not Looking
99%	100%	Total-(1% lost in Secondary Only due to rounding of percentages)

As these data show, separating out the graduates with secondary-only training alters the distribution of data for employment status.

Item 2 - Present Job Title and Item 3 - Job Duties. Items 2 and 3 were included in the survey as an independent check on Item 4. The cluster study staff used the job title and duties reported by the graduates to classify each graduate's job as the same as, related to, or different from the graduate's high school cluster training. The classifications made by the staff agreed within 5% with the responses reported in item 4 by the graduates. Therefore the graduates' responses in item 4 were accepted as valid indicators of the relationship between high school training and current employment.

Item 4 - Relation of Job to Cluster Training. To avoid misleading the reader, the raw data responses to item 4 are not indicated on the graduate questionnaire, since the raw data do not conform to the federal definition of training related employment. In order to satisfy the federal definition several adjustments must be made in the data. First, the federal definition discounts those graduates who enter the military. As Table 4.7 shows, 12% of the cluster graduates entered military service subsequent to high school graduation. This 12% must be subtracted from the graduate population before the relation between employment and training is computed.

Table 4.7
Cluster Graduates by Education and Military Experience

Secondary Only	47%
Post-Secondary	41%
Military	12%
Total	100%

Second, the graduates of high school vocational programs who go on to post-secondary programs are credited as Same/Related occupations. Table 4.7 also shows that 41% of the graduates went on to post-secondary training. This 41% must be added to the Same/Related category

Item 4 on the questionnaire shows the distribution of graduates after these adjustments have been made. In comparison, Table 4.8 below shows the unadjusted raw data percentages for graduates with secondary-only training and with post-secondary training. This table indicates that among cluster graduates who had secondary-only training 34% are currently employed in occupations that are the same as or related to their high school training.

Table 4.8
Same/Related Employment of Graduates With
Secondary-Only and Post-Secondary Training
(Unadjusted Data)

Type of Training	Same/Related Employment	
	First Job	Present Job
Secondary Only	29%	34%
Post-Secondary	54%	49%

Among cluster graduates who went on to post-secondary vocational school, junior college or college, 49% are currently employed in an occupation that is the same as or related to their high school cluster program. The table also shows what appears to be a 5% shift in Same/Related employment among both secondary-only and post-secondary respondents from the first job to the current job. A detailed analysis of that shift was made for secondary-only graduates, and that analysis is summarized in Table 4.9.

Table 4.9
Graduates With Secondary-Only
Training Employed in Same/Related Jobs

Total first job	29%
Shift into Same/Related	15%
Shift out of Same/Related	10%
Net shift into S/R	5%
Total present job	34%
Total first or present job	44%

Table 4.9 shows that among cluster graduates with secondary-only training there was a sizable shift in training related jobs from their first employment after high school to their present job. From the first job to the present job 15% of these graduates shifted out of jobs that were

different from their high school training, and into jobs that are the same as or related to their high school training. At the same time, 10% of the graduates shifted out of jobs the same as or related to their high school training and into jobs different from their training. This is a total shifting of 25% of the graduates in job categories from their first job after high school to their present job. However, 20% of these shifts cancel each other out, leaving a net shift of 5% of the graduates into same/related jobs. Adding the 29% and the 15% together, we can see that 44% of the secondary-only graduates have worked in a same/related job category since high school.

Item 5 - Why Not Working in Same/Related Job. Two observations need to be made about this item. First, there is a significant difference between graduates with secondary-only training and those with post-secondary training to the first response. Among those graduates who are currently employed outside their field of training, 42% of the graduates with secondary-only training reported no jobs available in the field of their training when they first began employment. However, among graduates employed outside their field of training who have post-secondary training, only 12% reported lack of jobs in their field as their reason.

Second, among graduates with secondary-only training employed outside their field of training, 58% gave job market conditions as the reason for not being employed in the field of their training.

Among both secondary-only and post-secondary graduates just 3% of those employed outside their field of training gave inadequate training as the reason.

Item 7A - Annual Salary. Cross-tabulations were made to compare the salaries of graduates with secondary-only training and those with post-secondary training. Table 4.10 shows that comparison. As the data indicate, post-secondary graduates have a slightly higher starting salary, but secondary-only graduates have shown the greatest gain in salary and are still ahead of post-secondary graduates. It should be remembered that graduates with post-secondary training have been in the labor force a shorter period of time.

Table 4.10
Mean Annual Salary of Cluster Graduates

Training	First Job	Present Job	Gain
Secondary-Only	$8,255	$12,546	$4,291
Post-Secondary	$8,598	$11,860	$3,262
Difference	$ 343	$ 686	$1,029

Item 7B - Location of Job. As the data in item 7B indicate, there has been a slight shift out of the home community from the first job to the present job. But a more remarkable fact is that 89% of the graduates took their first job within driving distance of where they lived during high school, and 81% of the graduates still work within driving distance of that home. A comparison of secondary-only graduates and graduates with post-secondary training was made, and the results are shown in Table 4.11.

Table 4.11
Relation of Present Job to
Residence During High School

	In Home Community	Within 50 Miles	Over 50 Miles
Secondary-Only	42%	48%	10%
Post-Secondary	46%	39%	15%

As can be seen, there is no significant difference between graduates with secondary-only training and those with post-secondary on geographic mobility during this period.

Item 10 - Method of Locating First Job. These data indicate that the graduates' high schools played a very minor role in helping to locate the first job. When secondary-only graduates are compared with post-secondary, the post-secondary respondents report a larger participation by high school personnel and programs in aiding in the location of their first job as seen in Table 4.12.

Table 4.12
How Did You Locate Your First Job?

	School Personnel/Programs			Family,Friends, Self	Other
	Instructor	Counselor	Other		
Secondary-Only	5%	--	--	90%	5%
Post-Secondary	16%	2%	8%	65%	10%

Items 11-14 - Job Satisfaction. Job satisfaction among all groups seems to be consistent, with the one exception that recent graduates are less satisfied with their present lift style. This may be attributed to their relatively recent entry into the labor market.

Item 22 - Post-Secondary Education. Analysis of the post-secondary educational experiences of graduates revealed that one-year cluster students are three times more likely than two-year students to attend college, and two and one-half times less likely to attend vocational-technical school, as shown in Table 4.13.

Table 4.13
Percentages of One-Year and Two-Year Cluster
Students Who Received Post-Secondary Education

	Vo-Tech	Jr.College	College
One-Year	12%	14%	20%
Two-Year	31%	10%	7%

Item 23 - Rating of Vocational Training. Ratings are consistent and fairly high on all the dimensions measured in this item except the dimension of general job preparation. Even on this dimension only 8% gave the program a poor rating. 1975-76 graduates gave training content a better rating than did the older graduates.

Item 24 - Rating of Job Skills Training. The majority of graduates gave their high school programs Good ratings in all job preparation training except job related paperwork and math, and the job finding and interview skills.

Summary of Cross-Tabulations

Table 4.14 presents a summary of the cross-tabulations performed among various subgroups of graduates on the questionnaire items. Overall there was little or no difference among the subgroups of graduates on their responses. Those minor differences that do exist have been discussed in the preceding item summaries. Perhaps the most noteworthy characteristic of these cross-tabulations is that there are no differences where differences were expected to be. Specifically, there were no major or systematic differences in demographic characteristics or survey responses between the following graduate population subgroups:

(1) 1970-1974 graduates vs. 1975-1976 graduates,

(2) *One year of cluster training vs. two or more years,

(3) Graduates with secondary training only vs. graduates with post-secondary training,

(4) Graduates with single cluster training vs. graduates with training in more than one cluster,

(5) Graduates employed in jobs the same as or related to high school training vs. graduates employed in jobs different from high school training.

*With the one exception that one-year students are more likely to attend college and less likely to attend vocational-technical school than are two-year cluster students. The reader should be aware that employers rated one and two year students significantly differently on several items.

Table 4.14

GRADUATE SURVEY: COMPARISON OF RESPONSES ON FIVE DIFFERENT CROSSTABULATIONS

Item	Description	Year of Graduation 1970-1974 vs 1975-1976	Years of cluster training 1 year vs 2 or more	Secondary Training Only vs Post-Secondary	Single Cluster Training vs Multi-cluster	Job related to training Same/Related vs Different
1	Employment status	*	-	-	*	-
2,3	Present job classification	-	-	-	-	-
4	Relation of job to cluster training	-	-	-	-	
5	Why not employed in field of training	-	-	*	-	
6	Number of employers since graduation					
	(1) Same as training	-	-	-	-	-
	(2) Related to training	-	-	-	-	-
	(3) Different from training	-	-	-	-	-
7	Annual salary first job	-	-	*	-	-
	Annual salary present job	-	-	-	-	-
	Distance to first job	-	-	-	-	-
	Distance to present job from original home	-	-	-	-	-
8,9	Classification of first job	-	-	*	-	-
10	Method of locating first job	-	-	-	-	-
11	Satisfaction with present working conditions	-	-	-	-	-
12	Satisfaction with present wages	-	-	-	-	-
13	General satisfaction with present job	-	-	-	-	-
14	Does job provide satisfactory life style	*	-	-	-	-
15	Outlook for the future in career	-	-	-	-	-
16	Future career plans	-	-	-	-	-

* Denotes a significant difference at the .05 level or less on this crossbreak. Detailed discussion can be found in the text.

Item	Description	Year of Graduation 1970-74 vs 1975-76	Years of training 1 yr. vs 2 or more	Secondary Only vs Post-Secondary	Single Cluster vs Multi-cluster	Job Same/Related to vs Different
17	(Unemployed) Worked since high school	-	-	-	-	
18	(Unemployed) How long did you work	-	-	-	-	
19	(Unemployed) How long since last job	-	-	-	-	
20	(Unemployed) How many previous employers	-	-	-	-	
21	(Unemployed) Why unemployed	-	-	*	-	
22(1)	Additional Education - None	-	-		-	
22(2)	Apprentice	-	-	-	-	.
22(3)	Management training program	-	-	-	-	.
22(4)	Company technical program	-	-	-	-	.
22(5)	Course by mail	-	-	-	-	.
22(6)	Vocational-Technical school	-	-		-	.
22(7)	Junior college	-	-		-	.
22(8)	Four year college	-	-		-	.
22(9)	Graduate degree	-	-		-	.
22(10)	Other additional education	-	-		-	.
23(1)	Rating of training for job preparation	-	-	-	-	-
23(2)	Rating training content - Up to date?	*	-	-	-	-
23(3)	Tools and equipment up to date?	-	-	-	-	-
23(4)	Instruction in classroom well presented?	-	-	-	-	-
23(5)	Instruction well presented in the shop?	-	-	-	-	-
23(6)	Instruction well organized?	-	-	-	*	-

Item	Description	Year of Graduation 1970-1974 vs 1975-1976	Years of Cluster training 1 year vs 2 or more years	Secondary Training Only vs Post-Secondary	Single Cluster Training vs Multi-cluster	Job Related to Training Same/Related vs Different
24(1)	Training rating - job related paperwork	-	-	-	-	-
24(2)	Training rating - to read job related materials	-	-	-	-	-
24(3)	Training rating - job related math	-	-	-	-	-
24(4)	Training rating - job skills	-	-	-	-	-
24(5)	Training rating - to use tools and equipment	-	-	-	-	-
24(6)	Training rating - to know high quality work	-	-	-	-	-
24(7)	Training rating - to fill out a job application	-	-	-	-	-
24(8)	Training rating - to handle a job interview	-	-	-	-	-
24(9)	Training rating - where to find a job	-	-	-	-	-
24(10)	Training rating - how to find a job	-	-	-	-	-
24(11)	Training rating - getting to work on time	-	-	-	-	-
24(12)	Training rating - going to work every day	-	-	-	-	-
24(13)	Training rating - working a full day	-	*	-	-	-
24(14)	Training rating - employee relations	-	-	*	-	-
24(15)	Training rating - relations with supervisor	-	-	*	-	-
25	Would recommend training to others	-	-	-	-	-
26	How does training compare today	-	-	-	-	*
27	Ideas for improving high school voc.-ed.	-	-	-	-	-

* NUMBERS ARE PERCENTAGES UNLESS OTHERWISE INDICATED

FORMER STUDENT SURVEY: VOCATIONAL CLUSTER SURVEY

Dear Former Student:

Our records show that during the time you attended ______________________________

____ you were enrolled in one or more of the following vocational courses for the length of time shown.

Course	Years Completed
(1) Electro-Mechanics	21%
(2) Metal Fabrication	24%
(3) Construction	25%
(4) Transportation	28%
(5) Health Occupations	19%

If the information we show here is not correct, please make any necessary corrections so that we will have the correct information.

The questions we will be asking in this survey about your high school training will be about the vocational courses shown above that you took.

First, tell us about your present status.

1. Are you now employed? (check one)

67% ☐ (1) Full-time (30 hours per week or more)
9% ☐ (2) Part-time (1-29 hours per week)
7% ☐ (3) Full-time military service
3% ☐ (4) Self-employed
10% ☐ (5) Unemployed (looking for a job)
5% ☐ (6) Unemployed (not looking for a job)

If you checked (5) or (6), skip to question 17.

2. If you are now employed, give your present job title.

____
(Please Print)

3. Briefly describe your job duties. ______________________________

____

4. Is your job related to your high school vocational training? (check one)

%
**54 ☐ (1) Job is the same type work as training
13 ☐ (2) Job in a type of work similar to training
33 ☐ (3) Job in a different type of work than training

**See pages IV-6 and IV-7 for a more detailed analysis of these categories.

If you checked (1) or (2), go to question 6.

5. If you checked answer (3) in question 4, why are you not working in the same type of work as your high school training? (check the most important reason)

%
28 ☐ (1) No jobs were available in my area of training when I first started work.
8 ☐ (2) I didn't like the type of work I was trained for.
19 ☐ (3) I received additional training or education in another field.
12 ☐ (4) Jobs don't pay enough in the area of my original training.
1 ☐ (5) There is no opportunity for advancement in the area of my original training.
-- ☐ (6) I have been promoted out of my original area.
1 ☐ (7) Jobs are no longer available in the field of my original training.
7 ☐ (8) Personal or health reasons
23 ☐ (9) Other ______________________________

6. How many employers have you worked for full-time since high school graduation? (Enter the number of employers in each category below)

(Mean)
1.5 (1) ____ employers in the same type work as my high school vocational training.
1.4 (2) ____ employers in a type of work similar to my high school training.
2.0 (3) ____ employers in a different type of work from my high school training.
1.6 ____ Total number of employers.

7. Looking back over the years, how did the first full-time job you had after high school compare with your present job?

A. Annual Salary?

	First Job	Present Job
(1) $5,000 - $9,999	☐ 86%	☐ 39%
(2) $10,000 - $14,999	☐ 11%	☐ 41%
(3) $15,000 - $19,999	☐ 3%	☐ 13%
(4) $20,000 - $24,999	☐ 1%	☐ 7%
(5) $25,000 or more	☐ --	☐ 2%

B. How far from where you lived when you went to high school?

	First Job %	Present Job %
(1) In my home community	☐ 62	☐ 41
(2) Within 50 miles and inside Georgia .	☐ 27	☐ 40
(3) Over 50 miles and inside Georgia ..	☐ 3	☐ 9
(4) Within 50 miles and outside Georgia	☐ --	☐ 1
(5) Over 50 miles and outside Georgia ..	☐ 2	☐ 8
(6) Military	7	8

8. What was your job title in your first full-time job after high school?

____

9. Briefly describe your duties in that first job. ______________________________

____

10. How did you locate your first job after high school? (check one)

%	
10	☐ (1) Instructor helped me find it
1	☐ (2) School counselor
1	☐ (3) School placement office
1	☐ (4) Other school personnel
2	☐ (5) Co-op program
41	☐ (6) Family or friends
--	☐ (7) Private employment agency
2	☐ (8) Public employment agency
36	☐ (9) I found it myself
7	☐ (10) Other ________________________________

11. How satisfied are you with your present working conditions?

%	
30	☐ (1) Very satisfied
49	☐ (2) Pretty well satisfied
15	☐ (3) Somewhat dissatisfied
5	☐ (4) Very dissatisfied

12. How satisfied are you with your present wages?

%	
14	☐ (1) Very satisfied
46	☐ (2) Pretty well satisfied
26	☐ (3) Somewhat dissatisfied
14	☐ (4) Very dissatisfied

13. How satisfied are you with your present job in general?

%	
29	☐ (1) Very satisfied
49	☐ (2) Pretty well satisfied
18	☐ (3) Somewhat dissatisfied
5	☐ (4) Very dissatisfied

14. Does your present job provide you with the kind of life that you want for yourself and your family?

%	
14	☐ (1) Definitely yes
36	☐ (2) Pretty much
30	☐ (3) Not exactly
19	☐ (4) Definitely not

15. How do things look for the future in your career?

%	
38	☐ (1) Very positive, will continue to improve
38	☐ (2) Will probably be better in the future
15	☐ (3) About the same
2	☐ (4) Things may not be as good as they have been
6	☐ (5) Very pessimistic, things don't look good

16. Do you plan to continue working in the same type work or to change careers?

%
20 ☐ (1) Will definitely stay in the same career.
26 ☐ (2) Probably will stay in the same type work.
20 ☐ (3) Don't know.
17 ☐ (4) Probably will change.
18 ☐ (5) Will definitely change to another career.

SKIP TO QUESTION 22 IF YOU ARE NOW EMPLOYED.

THIS SECTION IS FOR PEOPLE WHO ARE NOT NOW EMPLOYED.

17. Have you ever worked full-time or part-time since high school?

%
81 ☐ (1) Worked full-time
14 ☐ (2) Worked part-time
5 ☐ (3) Have not worked

IF YOU HAVE WORKED: (Mean)

18. How long did you work? Years 2 Months 6.

(Mean)
19. How long has it been since your last job? Years 1 Months 7.

20. How many employers have you worked for in jobs related to your high school vocational training? (Fill in the number of employers for each category)

(Mean)
(1) 1.3 employers in the same type work as my high school training.
(2) 1.8 employers in a type work similar to my high school training.
(3) 1.6 employers in a type work different from my high school training.
2.3 Total number of employers.

21. Why are you now unemployed? (check one)

%
5 ☐ (1) Full-time homemaker
16 ☐ (2) Going to school
5 ☐ (3) On temporary layoff
21 ☐ (4) No jobs available
-- ☐ (5) Do not want to work
5 ☐ (6) Health problems
-- ☐ (7) Physical handicaps
32 ☐ (8) Looking for a job
16 ☐ (9) Other ____________________

ALL RESPONDENTS, PLEASE ANSWER QUESTIONS 22 - 28

22. Now would you tell us about any additional education you have had since high school? (check all that apply)

	Now Enrolled %	Took Some %	Completed %	Total %
(1) None ☐ check here if none			39	39
(2) Apprentice	3 ☐	2 ☐	3 ☐	8
(3) Management training program	- ☐	1 ☐	5 ☐	5
(4) Company technical program	1 ☐	3 ☐	5 ☐	9
(5) Course by mail	1 ☐	2 ☐	3 ☐	5
(6) Vocational-Technical school	3 ☐	7 ☐	11 ☐	22
(7) Junior college	3 ☐	6 ☐	3 ☐	11
(8) Four-year college	7 ☐	3 ☐	3 ☐	14
(9) Graduate degree	- ☐	1 ☐	1 ☐	1
(10) Other ________________________	1 ☐	- ☐	5 ☐	5

23. Looking back on your high school vocational training, how would you rate the following things about the training you received? (check one block after each statement)

	Good %	Fair %	Poor %
(1) How well did your training prepare you for a job? ..	☐ 45	☐ 47	☐ 8
(2) Was the instructional content up-to-date?	☐ 62	☐ 32	☐ 6
(3) Were instructional tools and equipment up-to-date? .	☐ 77	☐ 18	☐ 5
(4) Was instruction well presented in the classroom? ..	☐ 60	☐ 31	☐ 9
(5) Was instruction well presented in the shop?.........	☐ 62	☐ 29	☐ 9
(6) Was instruction well organized?	☐ 60	☐ 33	☐ 10

24. How well do you think your high school vocational training prepared you to do the following tasks? (check one block after each statement)

	Good %	Fair %	Poor %
(1) To do any paper work required by a job?	☐ 28	☐ 43	☐ 26
(2) To read job related materials?	☐ 52	☐ 32	☐ 13
(3) To do job related math?	☐ 38	☐ 41	☐ 16
(4) To know the skills required on the job?	☐ 57	☐ 32	☐ 8
(5) To use tools and equipment needed on the job?	☐ 64	☐ 28	☐ 6
(6) To know good quality work from bad work?	☐ 72	☐ 18	☐ 6
(7) To fill out a job application?	☐ 46	☐ 26	☐ 24
(8) To handle a job interview?	☐ 40	☐ 30	☐ 25
(9) To know where to find a job?	☐ 28	☐ 31	☐ 37
(10) To know how to find a job?	☐ 30	☐ 32	☐ 34
(11) To know the value of getting to work on time?	☐ 64	☐ 17	☐ 17
(12) To know the value of going to work every day?	☐ 66	☐ 14	☐ 18
(13) To know the value of staying at work all day?	☐ 61	☐ 19	☐ 18
(14) To know how to get along with other employees?	☐ 59	☐ 24	☐ 14
(15) To know how to get along with the boss?	☐ 59	☐ 25	☐ 14

25. All in all, would you recommend your high school vocational training program for students today?

%
62 ☐ (1) Definitely yes
26 ☐ (2) Probably yes
7 ☐ (3) I don't know
5 ☐ (4) Probably not
1 ☐ (5) Definitely not

26. How do you think high school vocational training in Georgia today compares with when you were in high school?

%
13 ☐ (1) Much better today
44 ☐ (2) Probably better today than when I was in school
34 ☐ (3) I don't know
6 ☐ (4) Probably better when I was in school
2 ☐ (5) Definitely better when I was in school

27. Please give us your ideas on how high school vocational training in Georgia can be improved. ____________________

The three most frequent responses were: More job related experience, 11%; Better teachers, 10%; and Better equipment, 8%. A complete list of categories and frequencies appears on page ________.

____

28. If you are now employed or have been employed, would you give us the following information about your present or most recent employer. This information will be used for research purposes only.

____
Employer (Firm Name)

____
City, Town, or Post Office State

____
Employer's Major Product or Service

THANK YOU FOR YOUR HELP

Graduate Responses to Item 27,

Ideas on Improving Vocational Programs

Category Label	Per Cent
More Job Related Experience	11
Better Facilities	3
Better Student-Teacher Relations	2
Don't Know	3
More Equipment	2
More Teachers	3
No Improvement Needed	3
Better Equipment	8
Proper Tools	1
More Classes	5
Stricter Rules	3
More Field Trips	2
More Math-English	3
Class Size Too Large	5
Vocational Courses Should Be Taught Earlier in the Students Training	3
Other	16
Stress Improved Vocational Education	6
More Actual Work	3
Only Serious Students Should Be Allowed to Take Vocational Education	5
Help Find Jobs	2

Category Label	Per Cent
Better Teachers	10
Instruction in Getting a Job	3
Total	100

The Employer Survey

Regional Representation

A check was made to be sure that the employer survey was producing responses proportionally from the four OVE planning regions. That check was made by comparing the distribution of graduate respondents with the distribution of employers of graduates. That comparison appears in Table 4.15.

Table 4.15
Regional Distribution of Responding Graduates and Employers

Region	Graduate Response	Employer Response
I	42%	41%
II	29%	31%
III	12%	13%
IV	17%	15%
Total	100%	100%

As can be seen, the regional distribution of survey returns from graduates is practically identical to the distribution of survey returns from employers. This provides confidence in the representativeness of the employer survey results.

Field of Study Representation

Another check that was performed to insure the representativeness of the employer survey response was to compare the field of study of all graduates in the survey with the field of study of graduates whose employers responded to the survey. That comparison is shown in Table 4.16. These data also indicate practically identical distributions of graduates in the total survey and graduates whose employers responded to the survey. This comparison provides further confidence in the representativeness of the employer responses.

Table 4.16
Graduates' Field of Training for All Graduates in the Survey and for Graduates Whose Employers Responded to the Survey.

Field of Study	Graduate Respondents	Employers
Electro-Mechanics	21%	19%
Metal Fabrication	24%	25%
Construction	25%	25%
Transportation	28%	31%
Health Occupations	19%	17%
Total	100%	100%

Job Satisfaction

A third comparison to insure the representativeness of the employer responses was to compare the job satisfaction of all graduates in the graduate survey with the job satisfaction of graduates whose employers responded to the employer survey. That comparison appears in Table 4.17.

Table 4.17
Job Satisfaction for All Graduates in the Survey and for Graduates Whose Employers Responded

Job Satisfaction	Graduate Respondents	Employers
Very satisfied	29%	30%
Pretty well satisfied	49%	54%
Somewhat dissatisfied	18%	14%
Very dissatisfied	5%	2%
Total	100%	100%

As these data show, there is no significant difference between the job satisfaction of all graduates in the graduate survey and those graduates whose employers responded to the survey. There is no bias toward either well satisfied or dissatisfied employees in the response rate of employers.

Employer Ratings

Overall the employers' ratings of graduates' job abilities were very high as the responses to the items on page IV-26 indicate. The only abilities on which employers gave relatively low ratings were:

Item 14. To do job related math.

Item 17. To do high quality work on the job.

Item 19. To handle a job interview.

Item 20. To communicate in job related situations.

Training-Related Employment

Cross-tabulations were run to compare employer ratings of graduates employed in occupations the same as or related to their high school training and of graduates in occupations different from their high school training. There was no significant difference in employer responses to any item in the survey when graduates employed in field-of-training were compared with graduates employed out of field-of-training. According to employer ratings graduates perform just as well out-of-field as in field-of-training.

Years of Training

A cross-tabulation was run between employer rating and years of secondary vocational training. Those items which showed a significant difference are listed in Table 4.18.

Table 4.18
Percent of Graduates Receiving "Good" Ratings from Employers

		Years of Cluster Training	
	Item	1 Year	2 or more
13.	Ability to read job related materials.	79%	46%
17.	Ability to do high quality work.	69%	18%
19.	Ability to handle a job interview.	66%	18%
20.	Ability to communicate in job related situations.	72%	18%
21.	Ability to follow directions and obey orders of supervisors.	90%	59%
26.	Ability to finish assignments on time.	86%	54%
30.	Ability to learn new skills needed for promotion.	76%	50%

As these data indicate, on those items where there was a difference in rating, the graduates with one year of training consistently received the higher rating from employers.

* NUMBERS ARE PERCENTAGES UNLESS OTHERWISE INDICATED

EMPLOYER SURVEY: STATE OF GEORGIA VOCATIONAL CLUSTER STUDY

Dear Employer/Supervisor:

The questions asked in this survey will give us information regarding the effectiveness of vocational education in Georgia in preparing students to perform on the job. If the employee named on the letter attached to this survey no longer works for you, please rate his performance at the time he worked for you.

> NOTE: This report is authorized by the Georgia General Assembly. While you are not required to respond to this survey, your cooperation is needed to insure that the results of this effort are comprehensive, reliable, and timely. This form contains no employee identifiable information. The code number in the upper right-hand corner contains information about the vocational training the employee has received. No part of the code contains employee identifiers. Please remove the cover letter before returning this form.

1. How many employees work for your firm? ______________________

2. What is the primary product or service that you provide? ______________________

____

3. Does the employee named in the cover letter still work for you?
☐ (1) Yes 83%
☐ (2) No 17%

4. If not, was employee's termination voluntary?
☐ (1) Yes 73%
☐ (2) No 27%

5. Reason for termination.

%
- ☐ (1) Unable to perform job
9 ☐ (2) Unwilling to perform job
9 ☐ (3) Dissatisfied with pay
- ☐ (4) Dissatisfied with working conditions
9 ☐ (5) Personality conflict on the job
18 ☐ (6) Got a better job offer
- ☐ (7) Personal, family, or health reasons
- ☐ (8) Part of company layoff
54 ☐ (9) Other ______________________
- ☐ (10) Don't know

6. When the employee first came to you did he require additional training in order to perform his job?
☐ (1) Yes 88%
☐ (2) No 12%

7. If yes, what was the subject matter of that training?

%
22 ☐ (1) Basic skills
36 ☐ (2) Specialized skills/ Technical training
19 ☐ (3) Company procedures
2 ☐ (4) Management or supervisory training
9 ☐ (5) Other ______________________

8. If yes, where was the training performed?

%
89 ☐ (1) On the job
4 ☐ (2) In a company training school
2 ☐ (3) In a community Voc-Tech school
5 ☐ (4) Other ______

9. How many promotions has the employee received since coming to work for you?
1.- 31% 3.- 6% N/A - 53%
2.- 6% 4.- 3% Mean = 1.0

10. Is the employee (or was he/she at the time of termination) being considered for promotion?
☐ (1) Yes 38%
☐ (2) No 62%

11. Was the employee hired as a temporary or permanent employee?
☐ (1) Temporary 19%
☐ (2) Permanent 81%

12-30. Please rate the employee's competence in the following job related abilities:

		Good %	Fair %	Poor %	Don't Know %
12.	To do any paper work required by the job?...	☐ 56	☐ 24	☐ 3	☐ 16
13.	To read job related materials?	☐ 59	☐ 30	☐ 2	☐ 10
14.	To do job related math?	☐ 42	☐ 27	☐ 5	☐ 27
15.	Performing the skills required by the job?..	☐ 71	☐ 26	☐ 3	☐ -
16.	Using the tools and equipment needed on the job?	☐ 74	☐ 21	☐ 3	☐ 2
17.	To do high quality work on the job?	☐ 45	☐ 50	☐ 3	☐ 2
18.	To fill out a job application?	☐ 58	☐ 26	☐ 3	☐ 16
19.	To handle a job interview?	☐ 44	☐ 34	☐ 3	☐ 19
20.	To communicate in job related situations? ..	☐ 48	☐ 40	☐ 6	☐ 5
21.	To follow directions and obey orders of supervisors?	☐ 73	☐ 21	☐ 6	☐ -
22.	Getting to work on time?	☐ 77	☐ 16	☐ 6	☐ -
23.	Coming to work every day?	☐ 81	☐ 14	☐ 5	☐ -
24.	Doing a full day's work each day?	☐ 71	☐ 27	☐ 2	☐ -
25.	To accept responsibility?	☐ 65	☐ 32	☐ 2	☐ 2
26.	To finish assignments on time?	☐ 69	☐ 29	☐ 2	☐ -
27.	To get along with other employees?	☐ 84	☐ 14	☐ 2	☐ -
28.	To cooperate with company policies?	☐ 74	☐ 23	☐ 3	☐ -
29.	To get along with the boss?	☐ 81	☐ 19	☐ -	☐ -
30.	To learn the skills needed for promotion?...	☐ 58	☐ 37	☐ 5	☐ -

31. Please list any other positive aspects or deficiencies of this employee's training or performance not covered by this survey.

There was no pattern and no mode response to this item. 82% of the responses were positive. The only negative comments concerned poor attitude.

THANK YOU FOR YOUR HELP

The Current Student Survey

Regional Representation

A comparison of the distribution of current cluster students with the distribution of cluster graduates contained in the graduate census indicates that the regional enrollment was in the same relative proportions in 1979 as it was in the years 1970-1976.

Table 4.19
Regional Distribution of Graduates
and Current Cluster Students

Region	Graduates	Current Students
I	41%	41%
II	24%	27%
III	13%	14%
IV	22%	18%
Total	100%	100%

Survey Items

Item 10 - Cluster Enrollment. Table 4.20 gives a comparison between the distribution of enrollment in the study clusters among the current students who were surveyed in the spring of 1979, and in the graduate census for 1970-1976.

Table 4.20
Cluster Enrollment Figures* Compared for the
Current Student Survey and the Graduate Census

	Current Student Survey	Graduate Census
Electro-Mechanics	14%	21%
Metal Fabrication	20%	21%
Construction	24%	17%
Transportation	23%	23%
Health Occupations	18%	18%

* Percentages are calculated for single cluster students only.

The only shifts from 1970-1976 to the present are a slight decrease in the enrollment in electro-mechanics and a corresponding increase in the enrollment in construction. The other clusters remained unchanged.

Item 13 - Reason for Being in Vocational Education. Responses to this item indicate that 74% of the students currently enrolled in these clusters are there primarily for career preparation.

Item 15 - Evaluation of Course as Career Preparation. Only 23% of the respondents indicated that their current course enrollment definitely represents the kind of work they want to do as a career. Another 43% said the course is "sort of like" what they want as a career.

Item 16 - Plans After High School Graduation. Table 4.21 compares the stated plans of current cluster students with the actual post-high school experiences of cluster graduates from the graduate survey.

Table 4.21
Comparison of Current Cluster Students' Post-High School Plans With the Actual Experiences of Previous Graduates

	Current Student Plans	Actual Graduate Experience
Attend Voc-Tech School	23%	22%
Become a Homemaker	1%	1%
Join the Military	10%	12%
Go to College	23%	25%(Jr. and 4yr combined)

Item 17 - Location of First Job After High School. Table 4.22 compares current students' perceptions about the location of available jobs in their field of training with the actual experiences of previous graduates from the graduate survey.

Table 4.22
Location of First Job After High School

	Current Student Expectations	Previous Graduate Experience*
Home Community	49%	56%
Within 50 Miles	38%	44%
More than 50 Miles	13%	--
Total	100%	100%

*These figures represent the experiences of those high school graduates who went to work after high school in a job the same as or related to their field of training.

Based on the experiences of previous graduates, the expectations of current students concerning location of jobs in their field of training seem realistic.

Item 18 - Will In-field Employment Provide an Adequate Lifestyle? Again comparing current student expectations with actual experiences of graduates who worked in-field-of-training after high school graduation, we find the current students to be somewhat optimistic.

Table 4.23
Satisfaction With Lifestyle Provided by Employment in Field of Training

	Current Student Expectations	Previous Graduate Experiences
Yes	81%	57%
No	18%	43%

Item 19 - Availability of Jobs In-Field-of-Training. Table 4.24 indicates that current student expectations about the likelihood of finding employment in their field of training closely parallel the actual experience of previous graduates.

Table 4.24
Employment in Same/Related Job

Current Student Expectations	Previous Graduate Experiences
40%	44%

Items 20 and 21 - Rating of Vocational Training. With a few relatively minor variations, the current student evaluation of their vocational training is a very close parallel to the evaluation by cluster graduates. The current students tend to be a little more optimistic in their evaluation.

Item 22 - The Three Best and Three Worst Things About the Vocational Program. The three best things about the program were (1) the job preparation provided, (2) the teachers, and (3) the training is fun, rewarding, and provides useful knowledge. The three worst things about the program were (1) paperwork, tests, etc. (2) the need for more tools and equipment, and (3) the need to improve instructional techniques.

Item 24 - Suggestions for Improving the Program. The three most frequent suggestions were (1) better equipment and tools, (2) more vocational subjects taught, and (3) more supplies.

* NUMBERS ARE PERCENTAGES UNLESS OTHERWISE INDICATED.

CURRENT STUDENTS SURVEY: VOCATIONAL CLUSTER STUDY

Dear Student:

The State Department of Education is presently conducting a study to find out how we can improve the high school vocational programs. We need information that students can give us. We will keep your answers confidential and will only use them in making up reports, charts, and graphs showing summaries. Your name and address will be used only for follow-up information later in the study. Please give us your best answers. Thank you for your help.

1. School Name ______________________________ 2. County ____________

3. Your Name ______________________________ 4. Birth Date __/__/__

5. Address ______________________________ 6. Telephone (area) ____

______________________________ Zip: ________ ____________

7. Sex: 8. Your Current Grade: 9. Is your school on the quarter or semester?

78% [] (a) Male 6% [] (a) 9th [] (c) 11th 42% [] (a) Quarter 62%

22% [] (b) Female 23% [] (b) 10th [] (d) 12th 28% [] (b) Semester 34%

10. Please tell us which vocational course you are CURRENTLY enrolled in by placing the number of quarters or semesters you have completed, including the present quarter or semester, in the blank beside your course.

15% (a) Electro-Mechanics 26% (c) Construction 19% (e) Health Occupations

21% (b) Metal Fabrication 24% (d) Transportation (Percentages sum to more than 100% because of multi-cluster enrollment by some student

11. If you were previously enrolled in another vocational course, indicate below which course you were enrolled in and how many quarters or semesters you completed in that course.

14% (a) Agriculture
2% (b) Conservation, Recreation and Wildlife
12% (c) Construction
9% (d) Drafting and Design
8% (e) Electro-Mechanical
3% (f) Electronics
2% (g) Food Service
3% (h) Forestry
7% (i) Health
1% (j) Marketing and Distributive Ed.
11% (k) Metal Fabrication
5% (l) Ornamental Horticulture
8% (m) Transportation
2% (n) Graphic Arts
__ (o) None

12. Why are you taking your present vocational course?

72% [] (a) I wanted to take it.
1% [] (b) My counselor told me to take it.
4% [] (c) I could not get in another class I wanted, so I took this one.
6% [] (d) Another student told me it was a good course.
2% [] (e) My parents wanted me to take it.
1% [] (f) The school made me take it.
14% [] (g) Other reason ______________________________
1% [] (h) I don't know.

13. Why are you in vocational education courses at all?

74% [] (a) To prepare myself for a job.
10% [] (b) As a hobby.
8% [] (c) As an elective.
0% [] (d) Because my friends are here.
0% [] (e) My counselor wants me to take vocational courses.
2% [] (f) My parents want me to take vocational courses.
6% [] (g) Other reason ______________________________

14. Do you want to take vocational education courses?

94% [] (a) Yes
6% [] (b) No

15. Do you feel that your present vocational course is preparing you for the kind of work that you want to follow as a career?
23% ☐ (1) Exactly what I want to do as a career.
43% ☐ (2) Sort of like what I want to do.
12% ☐ (3) I don't know.
10% ☐ (4) Not much like what I want to do.
12% ☐ (5) Nothing like what I want as a career.

16. What do you plan to do when you finish high school?
36% ☐ (a) Go to work full time.
22% ☐ (b) Go to an area vocational/technical school (area vo-tech)
1% ☐ (c) Go to a private technical or vocational school.
0% ☐ (d) Take a course by mail.
1% ☐ (e) Become a homemaker.
10% ☐ (f) Join the military.
23% ☐ (g) Go to college.
6% ☐ (h) Other ____.

17. After you graduate from high school if you were to go right out and look for a job, how far do you think you would have to go to get the kind of job you are training for in your present vocational program?
49% ☐ (1) My home community.
35% ☐ (2) No more than 50 miles, inside Georgia.
7% ☐ (3) More than 50 miles, but inside Georgia.
3% ☐ (4) Outside of Georgia, but within 50 miles of home.
6% ☐ (5) Outside of Georgia and more than 50 miles.

18. Do you think your present vocational course will prepare you to get a job when you graduate that will pay enough money to provide you with the kind of life you want for yourself?
23% ☐ (1) Definitely yes.
40% ☐ (2) Probably will pay enough.
23% ☐ (3) I don't have any idea.
10% ☐ (4) Probably will not pay enough.
4% ☐ (5) Definitely will not pay enough.

19. How many jobs do you think will be available to a high school graduate in the field of your vocational training when you graduate?
9% ☐ (1) More jobs than people.
31% ☐ (2) Enough jobs to go around.
29% ☐ (3) I don't have any idea.
24% ☐ (4) Jobs will be hard to find.
8% ☐ (5) Not enough jobs to go around.

20. How would you rate the following things about the vocational training you are receiving in your present course?

	Good	Fair	Poor
(a) How well is your training preparing you for a job?....	☐ 58%	☐ 38%	☐ 3%
(b) Are the things being taught here up-to-date?	☐ 75%	☐ 24%	☐ 2%
(c) Are your tools and equipment up-to-date?	☐ 60%	☐ 34%	☐ 7%
(d) Is instruction well presented in the classroom?.......	☐ 63%	☐ 31%	☐ 6%
(e) Is instruction well presented in the lab?.............	☐ 59%	☐ 35%	☐ 6%
(f) Is instruction well organized?	☐ 59%	☐ 36%	☐ 5%

21. How well do you think your vocational program is preparing you to do the following tasks?

	Good	Fair	Poor
(a) To do any paper work required by a job?	☐ 25%	☐ 57%	☐ 18%
(b) To read job related materials?	☐ 48%	☐ 45%	☐ 8%
(c) To do job related math?	☐ 36%	☐ 45%	☐ 19%
(d) To know the skills required on the job?	☐ 73%	☐ 25%	☐ 2%
(e) To use tools and equipment needed on the job?	☐ 82%	☐ 18%	☐ 1%
(f) To know good quality work from bad work?	☐ 77%	☐ 22%	☐ 1%
(g) To fill out a job application?	☐ 42%	☐ 33%	☐ 24%
(h) To handle a job interview?	☐ 34%	☐ 37%	☐ 28%
(i) To know where to find a job?	☐ 40%	☐ 41%	☐ 18%
(j) To know how to find a job?	☐ 40%	☐ 40%	☐ 19%
(k) To know the value of getting to work on time?	☐ 70%	☐ 21%	☐ 9%
(l) To know the value of going to work every day?	☐ 70%	☐ 22%	☐ 8%
(m) To know the value of staying at work all day?	☐ 66%	☐ 25%	☐ 9%
(n) To know how to get along with other employees?	☐ 70%	☐ 24%	☐ 6%
(o) To know how to get along with the boss?	☐ 73%	☐ 20%	☐ 7%

22. What are the three BEST and the three WORST things about your vocational course?

BEST (1) Job Preparation

(2) The Teachers

(3) Classes are fun, rewarding, and provide useful knowledge.

WORST (1) Paperwork, tests, etc.

(2) Need more tools and equipment.

(3) Need to improve instructional techniques.

23. Would you recommend your vocational course to other students?

48 % ☐ (1) Definitely yes.
47 % ☐ (2) Probably yes.
3 % ☐ (3) Probably not.
2 % ☐ (4) Definitely not.

24. Please give us your ideas on how vocational training can be improved at your high school. (1) Better tools and equipment, (2) More vocational subjects taught, (3) More supplies.

Parents' Survey

Survey Items

Field of Study. Comparing field of study of all current students surveyed with field of study of students whose parents responded to the survey, as shown in Table 4.25, indicates a slightly higher response rate of parents of students in the health occupations cluster, and a corresponding lower response from parents of students in construction and transportation.

Table 4.25
Comparison of Field of Study

Field of Study	All Current Students	Parents Survey
Electro-Mechanics	15%	16%
Metal Fabrication	21%	17%
Construction	26%	21%
Transportation	24%	19%
Health Occupations	19%	26%

Item 1 - Reason for Taking Vocational Education. The strong majority (66%) of parents reported their child in vocational education for career preparation reasons, compared with 72% of the students themselves who gave this same reason.

Item 2 - Student's Plans After High School, and Item 3 - Parent's Wishes for Student After High School. Items 2 and 3 show a close agreement in responses. Apparently parents would more often like to see their children go on to postsecondary education instead of going to work or joining the military.

Item 4 - Perception of Children's Career Plans. Ninety-four percent of the parents indicate that they know their child's career decision.

Item 5 - Appropriateness of Vocational Training for Child's Career. Eleven percent of the parents reported that they think their child's vocational training is not consistent with the child's career goal.

Item 6 - Location of Available Jobs. Eighty-five percent of the parents thought that jobs in their child's field of training are available within

50 miles of home.

Item 7 - Adequacy of Pay. Only 51% of the parents felt that their child will be able to find a job after high school that pays an adequate salary.

Item 8 - Relative Availability of Jobs in Field of Training. Only 33% of the parents believe that there will be a moderate to ample supply of jobs in their child's field of training.

Item 9 - Rating of Vocational Training. Parent responses follow a very close parallel to student responses regarding adequacy of training.

Item 10 - Effect of Training on Child's Self-confidence. Nine out of ten (88%) parents believe that vocational training has had a positive effect on their child's self-confidence.

Item 11 - Effect of Training on Attitude Toward School. Three-fourths (73%) believe vocational training has had a positive impact on their child's overall attitude toward school.

Item 12 - Effect of Training on Attitude Toward Work. Eight out of ten (80%) of the parents attribute vocational training as having had a positive effect on their child's overall attitude about work.

Item 13 - Overall Effect of Training on Child. As can be seen from the distribution of responses, only 8% felt training has had no effect, and no parents reported any undesirable effects.

Item 14 - Recommendation of Vocational Program. Nine out of ten (90%) of the parents reported that they would recommend their child's vocational training for other students.

Item 15 - Recommendations for Improving Vocational Training. There were 25 different categories of suggestions for program improvements, but there was no modal response. Overall, parents seem pleased with their child's program.

NUMBERS ARE PERCENTAGES UNLESS OTHERWISE INDICATED

F*

PARENTS' SURVEY: VOCATIONAL CLUSTER STUDY

Dear Parent:

The State Department of Education is conducting a study to find out how we can improve the high school vocational programs. We need information that parents can give us. Our records show that ______________________ is now enrolled in the following vocational program:

16% ☐ (a) Electro-Mechanics
17% ☐ (b) Metal Fabrication
21% ☐ (c) Construction
19% ☐ (d) Transportation
26% ☐ (e) Health Occupations

Would you please spend about 15 minutes and give us your impression of the quality of training that she is receiving in that program? Your answer will be kept confidential. Please complete this survey form and return it in the postage paid envelope today.

1. What is the most important reason your daughter is enrolled in vocational training? (Check one)

66% ☐ (a) She wants to prepare herself for a career.
23% ☐ (b) She just likes the courses.
1% ☐ (c) It's the only thing she likes to take.
1% ☐ (d) It's what her friends are taking.
2% ☐ (e) Her counselor suggested she take vocational training.
2% ☐ (f) The school requires her to take it.
1% ☐ (g) Her parents want her to take it.
2% ☐ (h) I don't know.
4% ☐ (i) Other reason ______________________________.

2. What does your daughter plan to do when she finishes high school? (Check one)

32% ☐ (a) Go to work full time.
30% ☐ (b) Go to an area vocational/technical school (area vo-tech).
2% ☐ (c) Go to a private technical or vocational school.
- ☐ (d) Take a course by mail.
1% ☐ (e) Become a homemaker.
10% ☐ (f) Join the military.
21% ☐ (g) Go to college.
4% ☐ (h) Other ______________________________.

3. What do you want her to do? (Check one)

17% ☐ (a) Go to work full time.
38% ☐ (b) Go to an area vocational/technical school (area vo-tech).
2% ☐ (c) Go to a private technical or vocational school.
☐ (d) Take a course by mail.
1% ☐ (e) Become a homemaker.
4% ☐ (f) Join the military.
29% ☐ (g) Go to college.
9% ☐ (h) Other ______________________________.

4. Has your daughter decided what she wants to do as a career? (Check one)

27% ☐ (1) Yes, she knows just what she wants to do.
42% ☐ (2) She has a pretty good idea.
6% ☐ (3) I don't know whether she has or not.
21% ☐ (4) She doesn't know exactly what she wants.
4% ☐ (5) She doesn't have any idea.

* There are two versions of the Parents' Survey, identical except for the sex referent for the child. The version shown is for a female student. Both versions appear on pages III-49 and III-54.

5. If your daughter has decided on a career, is her vocational program training her in the type of work she wants to follow as a career? (Check one)

28% ☐ (1) Exactly what she wants to do as a career.
39% ☐ (2) Sort of like what she wants to do.
11% ☐ (3) I don't know.
11% ☐ (4) She doesn't know what she wants to do.
6% ☐ (5) Her training is not much like what she wants to do.
5% ☐ (6) Nothing like what she wants to do.

6. If your daughter were to go right out after high school graduation and look for a job, how far do you think she would have to go to find the kind of job she is being trained for? (Check one)

43% ☐ (1) In our home community.
39% ☐ (2) No more than 50 miles, inside Georgia.
10% ☐ (3) More than 50 miles, but inside Georgia.
3% ☐ (4) Outside of Georgia, but less than 50 miles from home.
6% ☐ (5) Outside of Georgia, and more than 50 miles.

7. Do you think that your daughter's vocational training will prepare her to find a job when she graduates from high school that will pay enough money to provide the kind of life you want for her? (Check one)

15% ☐ (1) Definitely yes.
36% ☐ (2) Probably would pay enough.
23% ☐ (3) I don't know.
15% ☐ (4) Probably would not pay enough.
11% ☐ (5) Definitely would not pay enough.

8. How many jobs do you think will be available to a high school graduate in the field of your daughter's vocational training when she graduates? (Check one)

7% ☐ (1) More jobs than people.
26% ☐ (2) Enough jobs to go around.
36% ☐ (3) I don't know.
22% ☐ (4) Jobs will be hard to find.
11% ☐ (5) Not enough jobs to go around.

9. From what you know about your daughter's vocational training, how well do you think it is preparing her to do the following tasks? (Check one box for each item.)

	Good	Fair	Poor	Don't Know
(a) To do any paper work required by a job?	☐ 30%	☐ 40%	☐ 11 %	☐ 18 %
(b) To read job related materials?	☐ 46%	☐ 36%	☐ 6 %	☐ 12 %
(c) To do job related math?	☐ 34%	☐ 38%	☐ 12 %	☐ 16 %
(d) To know the skills required on the job?	☐ 68%	☐ 24%	☐ 2 %	☐ 6 %
(e) To use tools and equipment needed on the job?	☐ 74%	☐ 19%	☐ 2 %	☐ 6 %
(f) To know good quality work from bad work?	☐ 68%	☐ 22%	☐ 2 %	☐ 9 %
(g) To fill out a job application?	☐ 51%	☐ 26%	☐ 10 %	☐ 13 %
(h) To handle a job interview?	☐ 43%	☐ 31%	☐ 11 %	☐ 15 %
(i) To know where to find a job?	☐ 41%	☐ 34%	☐ 11 %	☐ 14 %
(j) To know how to find a job?	☐ 42%	☐ 33%	☐ 12 %	☐ 13 %

F

	Good	Fair	Poor	Don't Know
(k) To know the value of getting to work on time?	☐ 73 %	☐ 15%	☐ 4%	☐ 8%
(l) To know the value of going to work every day?	☐ 73%	☐ 16%	☐ 3%	☐ 9%
(m) To know the value of staying at work all day?	☐ 71%	☐ 15%	☐ 3%	☐ 10%
(n) To know how to get along with other employees? ...	☐ 73%	☐ 15%	☐ 3%	☐ 10%
(o) To know how to get along with the boss?	☐ 74%	☐ 13%	☐ 3%	☐ 9%

10. What effect do you think your daughter's vocational training has had on her attitude about herself? (Check one)

33% ☐ (1) She has a great deal more self-confidence.
55% ☐ (2) She seems to have more self-confidence.
12% ☐ (3) No effect.
1% ☐ (4) She seems to have less self-confidence.
☐ (5) She has a great deal less self-confidence.

11. How has her vocational training affected her attitude toward school? (Check one)

22% ☐ (1) It has greatly improved her attitude toward school.
51% ☐ (2) She seems to have a better attitude about school.
26% ☐ (3) No effect
2% ☐ (4) Her attitude doesn't seem to be as good.
- ☐ (5) Her attitude toward school is much worse.

12. How has your daughter's vocational training affected her attitude toward work? (Check one)

31% ☐ (1) She has a greatly improved attitude about work.
49% ☐ (2) She seems to have a better attitude about work.
20% ☐ (3) No effect.
- ☐ (4) Her attitude doesn't seem to be quite as good as it was.
- ☐ (5) Her attitude about work is much worse.

13. All in all, what effect do you think vocational training has had on your daughter?

Job Preparation 17%
Overall good effect 14%
Aided in career decision 11%
Increased self-confidence 9%
Other miscellaneous positive 41%
No effect 8%

14. All things considered, would you recommend your daughter's vocational program to others? (Check one)

%
57 ☐ (1) Definitely yes.
33 ☐ (2) Probably yes.
7 ☐ (3) Don't know.
2 ☐ (4) Probably not.
1 ☐ (5) Definitely not.

15. Please give us your ideas on how vocational training can be improved at your daughter's high school.

____

____

____

THANK YOU FOR YOUR HELP.

TELEPHONE SURVEY OF LAY CITIZENS

Item 1: 54% of the persons contacted either had children of their own attending or knew children who attend the high school in question.

Item 2: 66% of the respondents knew of the high school vocational program in question, and 35% of the total knew or had known a child in vocational education at the school.

Item 3: 86% of the respondents believe that every high school student, regardless of future plans, should learn a job skill before leaving high school.

Item 4: 63% of those surveyed believed that learning several different skills is preferable to learning one skill.

Item 5: 40% of the respondents believe that most graduates will be able to find a good job within driving distance of home, and 44% believe that graduates will have to move out of the community to find work.

Item 6: 65% believe that graduates of the high school vocational program will have the skills they need to find a good job, and only 10% believe that they will not.

Item 7: 81% believe that most graduates want to go to work after high school.

Item 8: 67% of the respondents believe high school programs are better today than when they were in school, and only 11% think high schools are worse today.

Item 9: As the list of responses on page IV-42 indicates, drugs and alcohol were most often cited as the biggest problem high schools face today, and discipline was the second most reported problem.

Item 10: The most frequently reported suggestion for improving high schools was to have more dedicated and better educated teachers.

* NUMBERS ARE PERCENTAGES UNLESS OTHERWISE INDICATED October 1979

(Col 1) 6 **TELEPHONE SURVEY: CLUSTER STUDY**

High School ______________________________ Respondent # 185
(Col 2,3)

1. Do you have any children of your own who attend ____________ High School?

(Col 4) 17 (1) Yes

83 (2) No (a) Do you have any grandchildren, nieces, nephews, cousins, or other relatives who attend __________ High School or do you know any children who go there?

(Col 5) 45 (1) Yes

55 (2) No

2. Did you know that ____________ High School has a vocational program for training students in job skills?

(Col 6) 66 (1) Yes: Have you ever known a student who took vocational training at __________ High School?

(Col 7) 53 (1) Yes 47 (2) No

34 (2) No

3. Do you think that all students should learn some job skill before they graduate from high school?

(Col 8) 86 (1) Yes 10 (2) No 4 (3) Don't know

4. For those high school students who take vocational training, do you think they will be better able to find a good job if they learn a lot about one skill or if they learn as much as they can about several different skills?

(Col 9) 27 (1) One skill 10 (3) Don't know

63 (2) Several skills

5. Do you think that most graduates of ________ High School will be able to find a good job within driving distance of home, or do you think they will have to move out of the community to find work?

(Col 10) 40 (1) Within driving distance

44 (2) Will have to move out of the community

16 (3) Don't know

6. Do you think that students who graduate from the vocational program at ______________ High School will have the skills they need to find a good job?

(Col 11) 65 (1) Yes
10 (2) No
25 (3) Don't know

7. Do you think that most students want to find a job when they graduate from high school?

(Col 12) 81 (1) Yes
12 (2) No
7 (3) Don't know

8. In general, do you think high school programs are better, worse, or about the same today as when you were in school?

(Col 13) 67 (1) Better
11 (2) Worse
16 (3) About the same
6 (4) Don't know

9. What is the single biggest problem you think Georgia's high schools have today?

(Col 14,15) ______________________________

10. If you could recommend one thing to improve the education of Georgia's high school students, what would you recommend?

(Col 16,17) ______________________________

THAT'S ALL THE QUESTIONS I HAVE. THANK YOU VERY MUCH FOR YOUR HELP. GOODBYE.

Distribution of Parent Responses to Item 9

%	
20	Drugs and alcohol
11	Discipline
5	Motivation
4	Racial problems
4	Not educated at graduation
4	Better qualified administration
4	Pupil/teacher ratio
3	Math and reading skills
2	Drop outs
2	Financial backing
2	Vocational programs
2	More practical education
1	Social problems
1	Values are not taught
1	Distance to school too far
1	Metric system
33	No comment or don't know

Distribution of Parent Responses to Item 10

%	
12	More dedicated or educated teachers
8	Discipline
7	Better career training
7	Teacher/pupil ratio
4	Stricter grading
4	Reading and math skills
4	Better class curriculum
3	More motivated children
3	More practical knowledge
3	Prayer/Bible readings
2	Teacher salaries
2	More homework
2	Segregation
2	Rid school of drugs
1	Free lunches
1	Drop outs
1	Emphasize responsibility
1	Teach cultural black history
34	No comment or don't know

Vocational Supervisor Survey

The survey of secondary vocational supervisors had several research functions. Some of these functions are served by observing the direct responses of the supervisors to each question on the survey form. Other of the functions can only be served by cross-tabulation of the responses to different items within the questionnaire, and still other functions are served by the cross-tabulation of supervisor responses with the responses of other administrators and of vocational teachers. The results are presented here in two sections: (1) Direct responses to the survey items, and (2) Cross-tabulation among the survey items. Comparison of supervisor responses with other administrators and teachers is found in a later section of the report. The actual questionnaire items and response rates appear on pages IV-49 ff..

Survey Items

Basic Cluster Concepts. The following items indicate the degree of supervisor support for several key concepts in the cluster approach. Item 13 is a direct measure of support for the cluster program.

Item	% Agreement
1. Many of our students are not ready to make a realistic permanent career choice before they graduate from high school.	96%
2. The job market for most of our graduates will be in a state of change throughout their employment careers.	100%
4. Most of our graduates will continue their vocational training after high school.	36%
10. Most of our students will probably change careers at least four or five times during their lifetime.	90%
13. I believe that the cluster type curriculum is the best preparation for our students.	59%

As these items indicate, there is a very high level of support for three of the four basic concepts underlying the cluster approach. There is a very low level of agreement that most graduates will continue their vocational training after high school. On the fundamental issue of whether supervisors support the cluster approach, 41% believe that some other approach is preferable.

Perceived Success of the Vocational Program. The supervisors' view of the success of the vocational program is measured in the following items:

Item	% Agreement
6. If it were not for vocational courses, many of our students would drop out of school.	90%
9. Most of our students will find jobs in the area of their training or in a related field.	58%
12. Many of our graduates will not be able to find a job that pays a decent livable wage.	35%
19. Many of the students in our classes are not developing the proper attitudes for successful employment.	71%
34. There are enough jobs within a 50 mile radius for most graduates to find a suitable job in their field of training.	74%

There are some very interesting contrasts in these responses. Ninety percent of the supervisors credit their vocational programs with keeping potential dropouts in school. Yet only 58% believe that most of their graduates will be able to find jobs in their field of training. Thirty-five percent believe that their programs are not preparing many graduates to earn a decent wage, and seventy-one percent believe their programs to be less than successful in instilling the proper work attitudes. There is an unexplainable contrast between the responses to item 9 and item 34. Apparently many supervisors feel that there are enough suitable jobs in-field-of-training available locally, but they will not be found by graduates.

Student Career Orientation. There seems to be a consistent belief among supervisors that students lack career orientation, as illustrated in the following items.

	Item	% Agreement
5.	Many of our students are in vocational classes for non-career reasons such as hobbies, etc.	84%
18.	The vast majority of our students are very serious about learning the job skills necessary for successful employment.	38%
20.	Many of the students in our classes don't know or care about doing high quality work.	66%

These responses can be contrasted with current student responses in which 74% of the current students said that they are enrolled in vocational courses in order to prepare for a job.

Administrative Support. Responses to items 21-27 provide measures of administrative support. All items except item 21 indicate moderate to high levels of mutual support in the administrative structure. Item 21, however, indicates that a very large percentage of the supervisors feel that their vocational program is being misused as a depository for troublesome students.

Parent Support. Half of the supervisors indicated in item 28 that they thought that most students' parents show any great interest in the vocational program. This should be noted later in the report when comparing the responses of parents and students.

Business Community Involvement. In items 29-33 supervisors consistently reported a very high involvement of the local business community with their vocational program.

Interprogram Coordination. In items 35 and 36 over half the supervisors indicated that they did not work closely with either post-secondary or with secondary academic programs in coordinating course content.

Job Related Basic Skills. Ninety-five percent of the supervisors agreed that some of their students can not perform the reading required by the occupation for which they are being trained, and 94% agreed that some of their students cannot do the math required by their jobs.

Individualized Instruction. Over 80% of the supervisors indicate that they use individualized instruction in their programs, though 76% believe that some of their teachers don't have the necessary skills to conduct individualized instruction, and 59% believe that their teachers don't have enough time to do everything that is required in using individualized instruction. In addition, half the supervisors believe that they have inadequate budget to individualize.

Supportive Training. In those areas of training that are critical to performance of their job, 4 out of 10 supervisors reported no training in vocational clusters, 5 out of 10 reported no training in job task analysis, 8 out of 10 reported no training in job market surveys. In addition, 3 out of 10 reported no training in the function and use of advisory committees, 3 out of 10 reported no training in relevant state and federal policies, 2 out of 10 reported no training in general supervisory skills, and 1 out of 4 reported no training in individualized instruction.

Cross-Tabulations

In order to find out what other characteristics are associated with support or non-support of the cluster concept among supervisors, a cross-tabulation was run between item 13 and all other items on the questionnaire. Those items that are noteworthy for their correlation or lack of correlation with support for the cluster concept are discussed in the following section.

Item 3 - Teaching 1 or 2 Skills is Best. As was expected, this item produced a high negative correlation with support for the cluster concept. Supervisors who disagree with the cluster concept are strongly in favor of single skills training.

Item 10 - Students Will Change Careers 4 or 5 Times. Of the supervisors who disagree with this item, 90% also disagree with the cluster approach. Of those who support the cluster approach, 98% agree with item 10.

Item 11 - Teaching A Broad Range of Skills is Best. As expected, those who support clusters also agree with item 11. What is surprising is that among supervisors who do not believe the cluster is best, 43% do believe that teaching a broad range of skills is best.

Item 12 - Many Graduates Will Not Earn a Decent Wage. Supervisors who agree with item 12 are much more likely (76%) to support the cluster concept, while supervisors who disagree with the cluster concept are much more likely (76%) to disagree also with item 12. In other words, supervisors who support the cluster approach have less confidence in the ability of their graduates to make a decent wage than do supervisors who do not support the cluster approach.

Item 14 - The Cluster Approach Will Be Discontinued. Those who support the cluster approach believe it will be continued, and those who do not support the cluster approach believe that it will not be continued.

Item 51 (12) - Health Occupations Taught as a Cluster. An unanticipated finding is that in those schools where health occupations is offered as a cluster subject supervisors are far more likely to support the cluster approach in general.

* NUMBERS ARE PERCENTAGES UNLESS OTHERWISE INDICATED

VOCATIONAL SUPERVISOR SURVEY: VOCATIONAL CLUSTER STUDY

Conducted by the Department of Education of the
State of Georgia and The University of Georgia

Dear Supervisor:

You are in a unique position to provide some very valuable and necessary information to the State Department of Education. This survey is a critical part of an important study of the high school vocational programs in Georgia. The information you can provide will enable us to evaluate the success of our programs. No information is asked that can identify you or your school. Please give us your complete and honest answers so that these survey results will accurately reflect your point of view.

Thank you for your help.

For the following set of questions please indicate your agreement or disagreement with each statement as it applies to your students and your program by placing a check in either the Agree or Disagree column after each item.

	Agree (%)	Disagree
1. Many of our students are not ready to make a realistic permanent career choice before they graduate from high school.	96	
2. The job market for most of our graduates will be in a state of change throughout their employment careers.	100	
3. I believe that the best way to prepare a student for employment is to teach him or her as much as we can about one or two skills in-depth.	56	
4. Most of our graduates will continue their vocational training after high school.	36	
5. Many of our students are in vocational classes for non-career reasons such as hobbies, etc.	84	
6. If it were not for vocational courses, many of our students would drop out of school.	90	
7. The school counseling staff and the vocational department work closely in coordinating each student's program.	37	
8. Students who do well in academic subjects are generally steered away from our vocational program.	71	
9. Most of our students will find jobs in the area of their training or in a related field.	58	
10. Most of our students will probably change careers at least four or five times during their lifetime.	90	
11. I believe that the best training for our students is to teach them a broad range of related basic job skills.	69	

	Agree (%)	Disagree
12. Many of our graduates will not be able to find a job that pays a decent livable wage.	35	
13. I believe that the cluster type curriculum is the best preparation for our students.	59	
14. It is my belief that the cluster approach to vocational education in Georgia's high schools will be discontinued.	36	
15. We don't have enough equipment to operate our programs properly.	27	
16. Most of our equipment and tools are new and in good condition.	59	
17. Many of our classes are really too large for the kind of teaching that has to be done.	43	
18. The vast majority of our students are very serious about learning the job skills necessary for successful employment.	38	
19. Many of the students in our classes are not developing the proper attitudes for successful employment.	71	
20. Many of the students in our classes don't know or care about doing high quality work.	66	
21. Our classes are sometimes used as a dumping ground for problem students and troublemakers in order to get them out of the regular academic classes.	69	
22. Our principal understands and supports the proper purpose and operation of the vocational program.	74	
23. In general I am very pleased with the cooperation and support I get from my principal.	86	
24. I don't feel that the Board of Education gives enough support to our vocational program.	22	
25. I feel as though the State Department of Education sometimes fails to keep me informed of the latest state or federal policies that affect my program.	34	
26. The policies that do come from the State Department of Education are often unclear or inconsistent with other policies.	36	
27. When I do receive new state or federal policies I feel as though I should pass them along to the teachers who are affected.	96	
28. For the most part our students' parents show great interest in the vocational program.	51	

	Agree (%)	Disagree
29. I take special steps to try to develop interest for our programs among local employers.	96	
30. During the last year I had local business or community leaders come to talk to my students about the importance of vocational education.	82	
31. Some local businesses donate equipment, tools or materials to our programs.	79	
32. Many local employers are interested in having our students work in their business on a part-time or co-op basis.	96	
33. Local employers play a key role in helping us determine the skills to be taught in our classes.	76	
34. There are enough jobs within a fifty mile radius for most of our graduates to find suitable employment in the area of their training.	74	
35. I work closely with the post-secondary programs in our area to coordinate our course content with their vocational programs.	47	
36. We work closely with the academic teachers to coordinate the content of our vocational classes with the content of the students' academic courses.	48	
37. Some of our students can not do the reading required for successful employment in the area of their training.	95	
38. Some of our students can not do the math required for successful employment in the area of their training.	94	
39. We teach that the proper attitudes about work, such as coming to work on time, accepting responsibility, getting along with other employees, following company policies, etc., are just as important as teaching the actual job skills.	97	
40. I believe that individualized instruction is the best way to conduct our classes.	59	
41. I believe that the best way for my teachers to teach is for them to teach those skills they know best and not try to teach skills they don't feel comfortable with.	30	
42. We give all our students a pretest when they first come into each course to determine where to start them in the instructional sequence.	18	
43. We use prepackaged individualized materials that were purchased for our programs.	66	

	Agree (%)	Disagree
44. We have prepared our own individualized materials for use in some of our classes.	80	
45. There are individualized teaching materials available at our school that are not being used.	79	
46. Some of my teachers don't have the necessary skills to conduct individualized instruction.	76	
47. Some of our classroom arrangements are not conducive to individualized instruction.	69	
48. My teachers don't have enough time to do everything that is required in using the individualized approach to instruction.	59	
49. Our classes are too large to completely individualize instruction.	37	
50. I do not have sufficient budget to purchase the textbooks and other materials necessary to individualize instruction.	48	

51. Please indicate the vocational subjects in your program that are taught as a cluster curriculum. (check all that apply)

16 (1) Agriculture
33 (2) Business and Office Occ.
1 (3) Conservation, Recreation, and Wildlife
76 (4) Construction
25 (5) Cosmetology
54 (6) Drafting and Design
42 (7) Electro-Mechanics
11 (8) Electronics
21 (9) Food Services
4 (10) Forestry
28 (11) Graphic Arts
68 (12) Health Occupations
23 (13) Horticulture
25 (14) Marketing and Distributive Ed
64 (15) Metal Fabrication
81 (16) Transportation
15 (17) Other ____________

52. If you are offering any single skills subjects in your program that are not taught as part of a cluster curriculum, please list those subjects below.

53. How long have you been a vocational supervisor in Georgia's public high schools? _______ Years.

54. What is the highest level work experience in business, industry, etc. you have had in actually performing the job skills that are taught in your program?

Years **Type of Work and Level** (Apprentice, Journeyman, Specialist, etc.)

____ ____

____ ____

55. What previous experience have you had in a supervisory capacity?

____

____

56. What was the last position you held before taking your current position?

____

57. Have you had any formal instruction in any of the following areas since you became a vocational supervisor?

			Was the training adequate?	
Yes	No		Yes	No
84	__	(1) Supervisory skills	92	__
75	__	(2) Individualized instruction	86	__
63	__	(3) Vocational clusters	84	__
50	__	(4) Task analysis	75	__
24	__	(5) Job market surveys	50	__
70	__	(6) The function and use of Advisory Committees .	84	__
73	__	(7) State and federal policies that affect your program	85	__

58. Please make any comments you may have about the cluster programs, Georgia's high school vocational education, individualized instruction, or any other issues raised by this survey:

____

____

____

____

____

____

THANK YOU.

State Staff Survey

Like the vocational supervisor questionnaire, the state staff questionnaire was designed to serve several functions and measure several dimensions. The actual questionnaire items and frequency of response are listed on pages IV-58 — IV-62. The following discussion analyzes some of the dimensions measured in the survey.

Survey Items

Basic Cluster Concepts. Items 1,2,4,10, and 13 measure state staff support of the basic concepts underlying the cluster approach. On the issues of readiness to make a permanent career choice, long term fluctuations in the job market, and multiple career changes, the state staff showed an extremely high level of agreement with the cluster concept tenets. But only half the state staff believe that most of their students will continue their vocational training after high school and only half believe the cluster concept is the best approach.

Perceived Success of the Cluster Program. All the state staff believe that secondary vocational programs are instrumental in retaining some potential dropouts in school. In terms of preparing most graduates to find jobs in same/related occupations, 69% of the state staff believe that vocational programs are successful. One third of the state staff believe that many graduates will not be able to earn a livable wage. Sixty-one percent of the state staff believe that many of their students are not developing the proper attitudes for employment. Half the state staff believe that most graduates will not be able to find employment in their field of training within a fifty mile radius.

Student Career Orientation. The majority (67%) of the state staff believe many students are in vocational education for non-career reasons. Yet half the state staff feel that the majority of students are very serious about learning job skills, while 39% believe that many students don't know or care about doing high quality work. These mixed results seem to add up to an overall belief that a substantial portion of the students are not properly oriented toward job preparation.

Administrative Support. Items 21 - 26 give a measure of perceived administrative support for the vocational programs. State staff give consistent moderate to low ratings to the different facets of administrative support, giving the State Department of Education itself low ratings on statements of policy. There is strong feeling that vocational programs are used as dumping grounds for problem students.

Parent Support. A minority of the state staff believe that most parents show any great interest in their children's vocational programs.

Business Community Involvement. Responses to items 28-31 indicate a moderate to high belief that the local business community is closely involved in the support and guidance of the vocational programs.

Interprogram Coordination. The coordination between counseling departments and vocational departments in local programs is seen to be extremely low. It is almost universally believed that better academic students are discouraged from taking vocational courses. Virtually no close cooperation is seen between secondary vocational programs and either secondary academic programs or post-secondary programs. (Items 7,8,33, and 34).

Job Related Basic Skills. 82% and 92% of the state staff believe that many vocational students are not able to perform the reading and math, respectively, that are required by their field of training.

Budgetary Support. On questions of budgetary support, 60% - 80% of the state staff believe that many programs are underequipped with out of date and poorly maintained tools and equipment, and with insufficient budgets. (Questions 15, 16, and 48).

Individualized Instruction. Items 38, 40 - 47 measure state staff perceptions and support of the use of individualized instruction. The items indicate a belief among state staff that adequate teacher skills, class time and classroom arrangements are not present to support individualized instruction. They also believe that available individualized materials are not being used. Although only 47% of the state staff say that they think individualized instruction is the best way to conduct secondary vocational courses, 90% say that all students should be pre-tested to determine the appropriate starting point for them in the instructional sequence.

Supportive Training. 39% to 67% of the state staff report that they have had no training in seven areas that are critical to the operation of the cluster programs. (Question 55).

Cross-Tabulations

In order to try to determine what factors among the state staff are associated with support or lack of support for the cluster program, a cross-tabulation was run between item 13 and each of the other items on the state staff questionnaire. The cross-tabulation produced significant correlations between support for the cluster concept and only five other items:

Item 11 - It is best to teach a broad range of related basic job skills. This item is really a restatement of a key component of the cluster concept.

Item 14 - Belief that the cluster approach will be discontinued. Among those who support the cluster approach, virtually all (96%) believe it will be continued, but among those who do not support the cluster approach 59% believe it will be discontinued.

Item 38 - Belief that individualized instruction is the best method. This crosstab is very evenly divided; two-thirds of those who disagree with the use of individualized instruction also disagree with the cluster approach, and two-thirds (69%) of those who support individualized instruction also support the cluster approach.

Item 41 - Most classes use prepackaged purchased individualized materials. Half of those who support the cluster approach believe that most classes use prepackaged materials, whereas 82% of those who disagree with the cluster approach believe that prepackaged materials are not used in most classes.

Item 52 - Length of time as a vocational administrator. The significant relationship here is that among state staff who have been vocational administrators for five years or less, 8 out of 9 support the cluster approach.

* NUMBERS ARE PERCENTAGES UNLESS OTHERWISE INDICATED

STATE STAFF SURVEY: VOCATIONAL CLUSTER STUDY
Conducted by the Department of Education of the
State of Georgia and The University of Georgia

For the following set of questions please indicate your agreement or disagreement with each statement as it applies to your program by placing a check in either the Agree or Disagree column after each item.

	Agree (%)	Disagree
1. Many of our students are not ready to make a realistic permanent career choice before they graduate from high school.	92	
2. The job market for most of our graduates will be in a state of change throughout their employment careers.	98	
3. I believe that the best way to prepare a student for employment is to teach him or her as much as we can about one or two skills in-depth.	59	
4. Most of our graduates will continue their vocational training after high school.	51	
5. Many of our students are in vocational classes for non-career reasons such as hobbies, etc.	67	
6. If it were not for vocational courses, many of our students would drop out of school.	100	
7. As a general rule, school counseling staffs and vocational departments work closely in coordinating each student's program.	16	
8. Students who do well in academic subjects are generally steered away from vocational programs in many of our schools.	94	
9. Most of our students will find jobs in the area of their training or in a related field.	69	
10. Most of our students will probably change careers at least four or five times during their lifetime.	88	
11. I believe that the best training for our students is to teach them a broad range of related basic job skills.	61	
12. Many of our graduates will not be able to find a job that pays a decent livable wage.	33	
13. I believe that the cluster type curriculum is the best preparation for our students.	53	

	Agree (%)	Disagree
14. It is my belief that the cluster approach to vocational education in Georgia's high schools will be discontinued.	31	
15. Many schools don't have enough equipment to operate their vocational programs properly.	71	
16. Most of our equipment and tools are new and in good condition.	18	
17. Many of our classes are really too large for the kind of teaching that has to be done.	53	
18. The vast majority of our students are very serious about learning the job skills necessary for successful employment.	53	
19. Many of the students in our classes are not developing the proper attitudes for successful employment.	61	
20. Many of the students in our classes don't know or care about doing high quality work.	39	
21. Our classes are sometimes used as a dumping ground for problem students and troublemakers in order to get them out of the regular academic classes.	88	
22. Most principals understand and support the proper purpose and operation of their vocational program.	49	
23. In general, I am very pleased with the cooperation and support our secondary programs get from principals.	59	
24. In general, I don't feel that the Boards of Education give enough support to our vocational programs.	47	
25. I feel as though the State Department of Education sometimes fails to keep local administrators adequately informed of the latest state or federal policies that affect their programs.	45	
26. The policies that do come from the State Department of Education are often unclear or inconsistent with other policies.	47	
27. For the most part, our students' parents show great interest in the vocational programs.	47	
28. Most of our secondary programs take special steps to try to develop interest for our programs among local employers.	67	
29. Many local businesses donate equipment, tools, or materials to our programs.	67	

		Agree (%)	Disagree
30.	Many local employers are interested in having our students work in their business on a part-time or co-op basis.	90	
31.	Local employers play a key role in helping determine the skills to be taught in the classroom.	63	
32.	There are enough jobs within a fifty mile radius for most of our graduates to find suitable employment in the area of their training.	51	
33.	In general, secondary programs work closely with the post-secondary programs to coordinate course content between their vocational programs.	14	
34.	In general, vocational staff work closely with the academic teachers to coordinate the content of vocational classes with the content of the students' academic courses.	10	
35.	Many of our students can not do the reading required for successful employment in the area of their training.	82	
36.	Many of our students can not do the math required for successful employment in the area of their training.	92	
37.	I believe that teaching the proper attitudes about work, such as coming to work on time, accepting responsibility, getting along with other employees, following company policies, etc., is just as important as teaching the actual job skills.	100	
38.	I believe that individualized instruction is the best way to conduct secondary vocational courses.	53	
39.	I believe that the best way for teachers to teach is for them to teach those skills they know best and not try to teach skills with which they don't feel comfortable.	37	
40.	All students should be given a pretest when they first come into each course to determine where to start them in the instructional sequence.	90	
41.	Most of our classes use prepackaged individualized materials that were purchased for our programs.	37	
42.	Many teachers prepare their own individualized materials for use in their classes.	63	
43.	There are individualized teaching materials available at many schools that are not being used.	92	
44.	Many vocational teachers don't have the necessary skills to conduct individualized instruction.	88	

	Agree (%)	Disagree
45. Many of our classroom arrangements are not conducive to individualized instruction.	88	___
46. Teachers don't have enough time to do everything that is required in using the individualized approach to instruction.	55	___
47. In general, classes are too large to completely individualize instruction.	45	___
48. Programs don't have sufficient budget to purchase the textbooks and other materials necessary to individualize instruction.	61	___

49. Please indicate in the following list your areas of vocational specialty. (Check all that apply).

20 (1) Agriculture
10 (2) Business and Office Occ.
10 (3) Conservation, Recreation and Wildlife
8 (4) Construction
--- (5) Cosmetology
6 (6) Drafting and Design
6 (7) Electro-Mechanics
14 (8) Electronics
8 (9) Food Services
10 (10) Forestry
4 (11) Graphic Arts
4 (12) Health Occupations
6 (13) Horticulture
10 (14) Marketing and Distributive Ed.
4 (15) Metal Fabrication
6 (16) Transportation
39 (17) Other ____________________

____

50. Please indicate below any teaching experience that you have had in the area of your specialty.

Years	Level and vocational area
____	____________________
____	____________________

51. What is the highest level of work experience in business, industry, etc. that you have had in actually performing the job skills that are taught in the area of your specialty?

Years	Type of work and level (Apprentice, Journeyman, Specialist, etc.)
____	____________________
____	____________________

52. How long have you been a vocational administrator? ____________

53. What was the last position you held before taking your current position?

____

____

54. What is the highest educational degree that you hold?

Degree **Year** **Major**

______ ____ ____

55. Have you had any formal instruction in any of the following areas since you became a vocational administrator?

			Was the training adequate?	
Yes	No		Yes (%)	No
61	__	(1) Vocational Administration	84	__
63	__	(2) Individualized Instruction	86	__
37	__	(3) Vocational Clusters	74	__
45	__	(4) Task Analysis	96	__
33	__	(5) Job Market Surveys	78	__
49	__	(6) The function and use of Advisory Committees	91	__
59	__	(7) State and federal policies that affect your programs	92	__

56. Please make any comments you may have about the cluster programs, Georgia's high school vocational education, individualized instruction, or any other issues raised by this survey:

____

____

____

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____

____

THANK YOU

Vocational Teacher Survey

The dimensions measured in the Vocational Teacher Survey were the same dimensions measured in the Vocational Supervisor and State Staff surveys. A comparison of teacher responses with supervisor and state staff responses on parallel items is presented in a later section of this report. The survey instrument with the percentage responses to each item is presented on pages IV-69 - IV-73 .

It should be noted in interpreting these figures that the teachers included in this survey represent a variety of disciplines from secondary vocational pregrams across the state. Respondents were not restricted to the twenty sample schools used in other parts of the study, and also were not restricted to the five cluster areas designated for graduates and current students. The sample was not selected in such a way as to be statistically representative of the statewide population of secondary vocational intructors. Teachers who teach by the cluster approach are more heavily represented than are single skill teachers. The primary interest was in cluster instructors. Single skills instructors were used for comparative purposes.

Basic Cluster Concepts. The vocational instructors showed the following levels of support for key concepts in the cluster approach.

Item	% Agreement
1. Many of my students are not ready to make a realistic permanent career choice before they graduate from high school.	86%
2. The job market for most of my graduates will be in a state of change throughout their employment careers.	64%
4. Most of my graduates will continue their vocational training after high school.	40%

	Item	% Agreement
10.	Most of my students will probably change careers at least four or five times during their lifetime.	64%
13.	I believe that the cluster type curriculum is the best preparation for my students.	63%

Overall these items indicate a majority support for the concepts underlying the cluster concept and for the cluster approach itself.

Perceived Success of the Vocational Program. The teachers' view of the success of the vocational program is measured in the following items.

	Item	% Agreement
6.	If it were not for vocational courses, many of my students would drop out of school.	76%
9.	Most of my students will find jobs in the area of their training or in a related field.	68%
12.	Many of my graduates will not be able to find a job that pays a decent livable wage.	33%
18.	Many of the students in my classes are not developing the proper attitudes for successful employment.	51%
32.	There are enough jobs within a fifty mile radius for most of my graduates to find suitable employment in the area of their training.	78%

Items 12 and 18 are both negative statements; a disagreement with these two items indicates perceived success of the vocational programs. Perceived success of the programs is high except for item 18, students' attitudes. Two-thirds of the teachers surveyed believe that most of their students will find jobs in the area of their training or in a related field, but two-thirds also believe that many graduates will not be able to find a job that pays a decent wage.

Student Career Orientation. Teachers seem to be about evenly divided on their view of whether their students are career oriented, as indicated by the following items.

Item	% Agreement
5. Many of my students are in my classes for non-career reasons such as hobbies, etc.	52%
17. The vast majority of my students are very serious about learning the job skills necessary for successful employment.	47%
19. Many of the students in my classes don't know or care about doing high quality work.	52%

Administrative Support. Items 20 - 24 provide measures of administrative support. The responses to these items show an overall perception of good administrative support. A sizable minority, however, indicate problems in each of the items. On item 20 two-thirds of the teachers believe their programs are being used as a dumping ground for problem students.

Parent Support. Half the teachers (53%) indicated in item 26 that they feel that most of their students' parents don't have any real interest in the vocational program.

Business Community Involvement. In items 27 - 31 teachers report a moderate to high level of involvement of the local business community with their vocational programs. The intent to establish involvement, measured by item 27, is higher than the actual concrete steps measured by items 28 - 31.

Interprogram Coordination. About half the teachers report working with the post secondary vocational programs and the secondary academic programs to coordinate course content (Items 33 and 34).

Job Related Basic Skills. Approximately nine out of ten teachers agree that some of their students can not perform the reading and math required for successful employment in the area of their training (Items 35 and 36).

Individualized Instruction. Three-fourths (75%) of the teachers report that they use individualized instruction in teaching their classes (Item 42), though 26% to 56% report some problems in using this approach(Items 43 - 47).

Cross Tabulations

In order to find out what other characteristics are associated with support or non-support of the cluster concept among teachers, item 13 was cross-tabulated with all other items on the questionnaire. The following items are noteworthy for their correlation or lack of correlation with support for the cluster approach.

Items 1, 2, 4, and 10. What is interesting here is that these four items, which measure belief in basic premises underlying the cluster concept, do not show a significant correlation with support for the cluster concept.

Item 3 - Teaching 1 or 2 skills is best. As was expected, those who support the cluster approach disagree that teaching one or two skills in depth is the best job preparation for students. But unexpectedly, it was found that among those teachers who disagree that the cluster approach is the best preparation, 44% also disagree that teaching one or two skills in depth is best. In other words, these teachers disagree with both the cluster approach and the single skills approach.

Item 11 - Teaching a broad range of related basic skills is best. Instructors who support the cluster approach overwhelmingly agree (90%) with item 11. Inexplicably, two-thirds of those who disagree with the cluster approach also agree that teaching a broad range of related basic skills is the best preparation for students.

Item 18 - Many students are not developing the proper attitudes for successful employment. Teachers who disagree with the cluster approach are significantly more likely to agree with item 18.

Item 38 - Individualized instruction is the best approach. There is a significant positive correlation between support for the cluster approach and support for individualized instruction.

Item 46 - Classes are too large to completely individualize instruction. Instructors who disagree with the cluster approach are more likely to agree with item 47 than are instructors who support the cluster approach (64% and 48%, respectively).

Item 48 - Belief that the cluster curriculum will be discontinued. Among those who support the cluster approach 13% believe it will be discontinued, whereas 60% of those who disagree with the cluster approach believe it will be discontinued.

Item 49 - Area of instruction. The following figures show teacher support for the cluster approach by area of instruction.

Subject Area	Agree with Cluster Approach
Construction	68%
Cosmetology	65%
Drafting	68%
Electro-Mechanics	59%
Electronics	45%
Graphic Arts	74%
Health Occupations	80%
Metal Fabrication	56%
Transportation	54%
Other	56%

Item 50 - Teach single skill or cluster. Support for the cluster approach was twice as high (72%) among teachers who use it for their teaching method as among teachers who use the single skill approach (37%).

Type of school. As the figures in table 4.26 illustrate, vocational instructors in comprehensive high schools are far more likely to support the cluster approach than are instructors in either regular high school vocational programs or area vocational high schools.

Table 4.26

Vocational Instructor Support for the Cluster Concept

Cluster Approach is best	Regular High School	Comprehensive High School	Area Voc. High School
Agree	37%	69%	41%
Disagree	63%	31%	59%

* NUMBERS ARE PERCENTAGES UNLESS OTHERWISE INDICATED

VOCATIONAL TEACHER SURVEY: VOCATIONAL CLUSTER STUDY

Conducted by the Department of Education of the
State of Georgia and The University of Georgia

Dear Teacher:

You are in a unique position to provide some very valuable and necessary information to the State Department of Education. This survey is a critical part of an important study of the high school vocational programs in Georgia. The information you can provide will enable us to evaluate the success of our programs. No information is asked that can identify you or your school. Please give us your complete and honest answers so that these survey results will accurately reflect your point of view.

Thank you for your help.

For questions 1-48 please indicate your agreement or disagreement with each of the statements as they apply to your students and your program by placing a check in either the Agree or Disagree column after each item.

	Agree (%)	Disagree
1. Many of my students are not ready to make a realistic permanent career choice before they graduate from high school.	86	
2. The job market for most of my graduates will be in a state of change throughout their employment careers.	64	
3. I believe that the best way to prepare my students for employment is to teach them as much as I can about one or two skills in-depth.	41	
4. Most of my graduates will continue their vocational training after high school.	40	
5. Many of my students are in my classes for non-career reasons such as hobbies, etc.	52	
6. If it were not for vocational courses, many of my students would drop out of school.	76	
7. The school counseling staff and I work closely in coordinating each student's program.	35	
8. Students who do well in academic subjects at my school are steered away from vocational education.	66	
9. Most of my students will find jobs in the area of their training or in a related field.	68	
10. Most of my students will probably change careers at least four or five times during their lifetime.	64	
11. I believe that the best training for my students is to teach them a broad range of related basic job skills.	82	

	Agree (%)	Disagree
12. Many of my graduates will not be able to find a job that pays a decent livable wage.	33	
13. I believe that the cluster type curriculum is the best preparation for my students.	63	
14. I would teach more job skills if I had more equipment.	66	
15. Most of my equipment and tools are new and in good condition.	62	
16. My classes are really too large for the kind of teaching I have to do.	47	
17. The vast majority of my students are very serious about learning the job skills necessary for successful employment.	47	
18. Many of the students in my classes are not developing the proper attitudes for successful employment.	51	
19. Many of the students in my classes don't know or care about doing high quality work.	52	
20. My classes are sometimes used as a dumping ground for problem students and troublemakers in order to get them out of the regular academic classes.	66	
21. My principal understands and supports the proper purpose and operation of the vocational program.	68	
22. My vocational supervisor gives me the responsibility of deciding what to teach and how to teach my courses.	92	
23. My vocational supervisor sometimes fails to keep me informed of relevant state and federal policies that affect my program.	26	
24. In general I am very pleased with the support and cooperation I get from my vocational supervisor.	89	
25. I do not feel that the Board of Education gives enough support to our vocational program.	43	
26. Most of my students' parents apparently don't have any real interest in the vocational program.	53	
27. I take special steps to try to develop interest for my programs among local employers.	87	
28. During the last year I had local business or community leaders come to talk to my students about the importance of vocational education.	56	
29. Some local businesses donate equipment, tools or materials to my program.	48	

	Agree (%)	Disagree
30. Local businessmen give my program special rates for the purchase of materials used in my classes.	52	
31. Many local employers are interested in having my students work in their business on a part-time or co-op basis.	66	
32. There are enough jobs within a fifty mile radius for most of my graduates to find suitable employment in the area of their training.	78	
33. I work closely with post secondary programs in our area to coordinate my course content with their vocational programs.	49	
34. We have no coordination between the content of my courses and the content of the students' academic classes.	52	
35. Some of my students can not do the reading required for successful employment in the area of their training.	89	
36. Some of my students can not do the math required for successful employment in the area of their training.	91	
37. I believe that teaching the proper attitudes about work, such as coming to work on time, accepting responsibility, getting along with other employees, following company policies, etc., is just as important as teaching the actual job skills.	99	
38. I find that individualized instruction is one of the best ways to conduct my classes.	65	
39. I believe that the best way for me to teach is to teach those skills I know best and not try to teach things I don't feel comfortable with.	36	
40. I give my students a pretest when they first come into a course to determine where to start them in the instructional sequence.	47	
41. I use prepackaged individualized materials that were purchased for the program in teaching my courses.	52	
42. I have prepared my own individualized materials for teaching my classes.	75	
43. There are individualized teaching materials available at our school that I don't use in my classes.	26	
44. My classroom arrangement is not conducive to individualized instruction.	34	
45. I don't have enough time to do everything that is required to use the individualized approach in my classes.	56	

	Agree	Disagree
46. My classes are too large to completely individualize instruction in my classes.	(%) 53	___
47. I do not have sufficient budget to purchase the textbooks and other materials necessary to individualize instruction in my classes.	54	___
48. It is my belief that the cluster approach to vocational education in Georgia's high schools will be discontinued.	26	___

49. What is the area of vocational education that you teach? (check all that you teach)

14 (1)Construction
5 (2)Cosmetology
10 (3)Drafting
9 (4)Electro-Mechanics
5 (5)Electronics
5 (6)Graphic Arts
18 (7)Health Occupations
10 (8)Metal Fabrication
17 (9)Transportation
16 (10)Other ______________________

50. Are the courses you teach organized according to the cluster approach or the single skills approach? (check one)

49 (1)Cluster Approach
12 (2)Single Skills Approach
31 (3)Some of both
3 (4)Don't know

51. If you checked (2), (3), or (4) in question 50, please list the courses that you teach.

______________________ ______________________

______________________ ______________________

______________________ ______________________

52. How long have you been a vocational instructor in Georgia's public high schools? _____ Years.

53. What type of teaching certificate do you hold? _____.

54. How long have you held your present certificate? ____________________.

55. Do you plan future education? ___Yes ___No
If yes, what type?

28 (1)Higher certificate
25 (2)College degree
23 (3)Graduate degree
12 (4)Other ______________________________
12 No Response

56. What is the highest level work experience in business, industry, etc., you have had in the subject areas that you are teaching?

Years Type of Work and Level (Apprentice, Journeyman, Specialist, etc.)

____ ____.

57. Have you had any formal instruction in any of the following areas since you became a vocational instructor?

(%) Yes	No	
86	__	(1) Individualized instruction
67	__	(2) Vocational clusters
78	__	(3) The use of audio visuals
72	__	(4) The use of prepackaged instructional materials
86	__	(5) Teaching methods

58. Do you frequently use audio-visuals in your classes? 91% (1) Yes   9% (2) No

59. Please indicate previous teaching experience that you had before becoming a vocational instructor in Georgia's public high schools.

(%)

47 (1) None
4 (2) High school vocational instructor elsewhere
8 (3) Secondary academic instructor
1 (4) Elementary teacher
7 (5) Post-secondary vocational instructor
12 (6) ~~Other~~ Military ______________________________
13 (7) Other

60. Please make any comments you may have about the cluster programs, Georgia's high school vocational education, or any other issues raised by this survey:

____

____

____

____

____

Please check below the category for the type of high school in which you teach.

(%) 64 (1) Comprehensive High School
7 (2) Area Vocational High School
- (3) Career Education Center
5 (4) Regular High School
- (5) Other ______________________________
24 No Response

THANK YOU

COMPARISON OF TEACHER, SUPERVISOR, AND STATE STAFF RESPONSES TO SURVEY ITEMS

Cross-tabulations were made comparing the responses of secondary vocational teachers, vocational supervisors, and state vocational staff on parallel items. The discussion in this section centers on those comparisons.

A. AREAS IN WHICH TEACHER RESPONSES WERE SIGNIFICANTLY DIFFERENT FROM SUPERVISOR AND STATE STAFF RESPONSES.

Student Career Choice. Teachers more often believe that students *are ready* to make realistic, permanent career choices before graduating from high school.

Perceived Job Market Changes. Teachers are less likely to believe that the job market is going to be in a state of change throughout their students' employment careers.

Teaching Broad Range of Skills. Teachers more often believe that teaching a broad range of related basic job skills is the best training.

Career Orientation. Teachers are less likely to believe that students are in their classes for non-career reasons.

Dropout Prevention. Fewer teachers credit vocational programs with preventing dropouts.

Poor Student Attitude. Fewer teachers believe that their students are not developing proper attitudes for employment.

Business Community Involvement. Teachers report a lower level of business community involvement in their programs than do supervisors or state staff.

Individualized Instruction. Teachers are much less likely to report unused individualized teaching materials, and much less likely to describe their classroom arrangement as not conducive to the use of individualized instruction.

B. AREAS IN WHICH VOCATIONAL SUPERVISOR RESPONSES WERE SIGNIFICANTLY DIFFERENT FROM TEACHER AND STATE STAFF RESPONSES.

Equipment Restraints. Vocational supervisors were less likely to say that more job skills would be taught if more equipment were available.

Communication of Policy. Vocational supervisors give themselves more credit for passing on relevant state and federal policies than teachers give them.

Board of Education Support. Supervisors give their boards of education higher marks for support of the vocational program.

Use of Pretests. Supervisors report a lower use of pretests in the classroom for determining where to start students in the instructional sequence.

Class Size. Vocational supervisors are less likely to believe that classes are too large to individualize instruction.

C. AREAS IN WHICH STATE STAFF RESPONSES ARE SIGNIFICANTLY DIFFERENT FROM TEACHER AND VOCATIONAL SUPERVISOR RESPONSES.

Interprogram Coordination. State staff are less likely to report coordination between school counseling departments and vocational departments, and are more likely to believe that better academic students are steered away from vocational education.

Tools and Equipment. State staff give a lower rating to the condition of tools and equipment.

Student Interest in Quality Work. State staff give students more credit for interest in doing high quality work.

Problem Students. State staff are more likely to feel that vocational programs are being used as dumping grounds for problem students and troublemakers.

Principal Support. State staff give principals lower marks for understanding and support of the vocational programs.

Employer Interest. State staff are less likely to believe that efforts are made to develop interest among local employers.

Job Market. State staff are less likely to believe that graduates will be able to find employment in their field of training within a fifty mile radius.

Post-Secondary Coordination. State staff are less likely to believe that there is a level of close coordination between local secondary and post-secondary vocational programs.

Academic Coordination. State staff are more likely to believe that there is no coordination between secondary academic programs and secondary vocational programs.

Use of Individualized Materials. State staff are less likely to believe that prepackaged individualized teaching materials are in use in the classroom, and are also less likely to believe that teachers prepare their own individualized materials.

SECTION V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

With the emergence of the comprehensive high school in the 1960's was an urgent need to develop a uniform delivery system for vocational education at the secondary level. The cluster concept as described in Section II of this report, was selected as the best available delivery system at the time. Sufficient developmental and implementation time has now lapsed to allow for the testing of the effectiveness of vocational education in general and the cluster concept in particular.

The Governor's Task Force on Education, The State Legislature, and the State Department of Education each contributed to the ultimate initiation of this study. Each of these groups was concerned with obtaining the feedback necessary for program improvement and continued growth of a sound vocational education program in Georgia secondary schools. Within that context the purpose for this study was established TO DETERMINE THE EFFECTIVENESS OF THE CLUSTER APPROACH AS PERCEIVED BY A VARIETY OF POPULATIONS AND AS DEMONSTRATED IN THE LABOR MARKET AND ADVANCED EDUCATION SETTINGS. To achieve this purpose the answers to three specific questions were sought from predetermined samples of eight populations. These questions were:

1. Have graduates of the vocational cluster programs obtained jobs within the field or related fields for which they were trained?

2. Are graduates of vocational cluster programs adequately prepared to enter their fields of employment?

3. (A) What are the students' attitudes toward the training they have received? and (B) What degree of job flexibility does the cluster program provide?

A series of sub-questions was developed to serve as measurements and indicators of the answers to these three basic research questions. The answers would be derived from the responses of randomly selected samples of the following specified populations: graduates who completed one or two year cluster programs between 1970 and 1976, the employers of these graduates, students currently enrolled in cluster programs, parents of these current students, vocational administrators, state staff, vocational instructors, and the lay public.

Five vocational clusters were selected for the study on the basis of their representativeness of the student enrollment during the years 1970-1976. Those clusters are electro-mechanics, metal fabrication, construction, transportation, and health occupations. These clusters are the oldest, the most popular among students in terms of enrollment, and are offered in the largest number of schools.

This study was implemented according to the best available methods for conducting descriptive survey research. The universe population was identified properly and from that universe the eight specific populations were identified and samples pulled by random sampling techniques based on established guidelines. Survey instruments were prepared for each of the eight sample groups with items that measured both factual and attitudinal data. Parallel items were used on the different instruments so that the different study populations could be compared on the same issues.

Completed surveys were received from a total of 3483 respondents. The data were analyzed using standard statistical routines in the SPSS* and SAS**statistical packages and the University of Georgia computer center facilities. Initial analysis consisted of computation of frequency and percentage distributions for survey responses. Secondary analysis consisted of cross tabulations among items and the application of appropriate statistical techniques to test for significant differences.

Based on the analysis of data obtained from this study, the following findings can be stated.

Graduates

1. The study samples do represent the four vocational education planning regions of the state of Georgia.
2. The graduates were classified by year of graduation into two groups -- those who graduated between the years 1970-1974 and those graduating in 1975-1976. Although there was a slightly higher return from the later classes (not significant), analysis revealed that it had no effect on the study results because year of graduation was not significantly related to any other finding in the study.
3. Graduates with one year of secondary cluster training were compared with graduates who had two or more years in a secondary cluster program. The one year and two year graduates showed the same or similar characteristics on the majority of study items. However, one-year students were three times more likely to attend college, and were

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*SPSS-Statistical Package for the Social Sciences is a computerized program for mathematically analyzing research data.

**SAS-Statistical Analysis System is a computerized program for mathematically analyzing research data.

rated significantly higher by their employers on several items of communication skills and work attitudes.

4. The respondents to the study paralleled on a pro rata basis the original percentages of the population for each of the clusters selected for inclusion in the study.

5. The respondents indicate that 95% of the cluster graduates are still in the labor force. Of the five percent not now in the labor force, three percent gave no specific reason for their status.

6. The unemployment rate among all graduates is 10%. However, of this 10%, 8% have been employed, indicating that their current status is temporary, not chronic. Only 2% of the graduates have not worked during the last three to five years since high school graduation.

7. Of all graduates responding 13% are currently continuing their education. Some of these are employed part-time, some full-time and some are unemployed. Since their graduation from high school a total of 47% of the cluster graduates have attended vocational-technical schools, junior college, or college.

8. Considering all jobs held after graduation from high school 44% of students completing secondary programs only have worked or are working in the field for which they were trained. Of those who go on to attend post-secondary schools that figure is 54%.

9. Reasons cited by respondents for not being employed in field

   a.- Respondents with secondary training only

      - No jobs available, 42%
      - Job market condition (i.e., pay), 12%

   b.- Respondents with additional post-secondary training

      - No jobs available, 12%

c.- From both groups 3% reported inadequate training

10. Responding secondary only cluster graduates are beginning work with an average starting salary of $8,255 and are currently averaging $12,546. This compares favorably with their colleagues who went on to post-secondary programs. They are currently $683 ahead of the post-secondary group in annual salary.
11. The large majority of all graduates (89%) begin work within a 50 mile radius of their home community and remain there (81%). Among graduates with secondary-only training 96% found their first job within 50 miles.
12. Graduates of secondary cluster programs give little credit to the school and school personnel in finding their first job. What credit there is (5%) goes to the vocational instructor.
13. Most respondents (78%) indicate satisfaction with their current jobs.
14. The respondents rated the training they received in the cluster program very high.
15. The respondents were satisfied with all aspects of their training except job related paperwork, math and the job finding and interview skills.

Employers

An analysis of the demographic data pertaining to employers responding to the study indicated that they did represent the universe population.

1. The responding employers rated the general job skills of the cluster graduates very high.
2. The responding employers indicated that the cluster graduates had deficits in performing job related math, doing work of a high quality, job interview skills, and communicating in job-related situations.

3. Graduates with one year of training were rated significantly higher than those with two or more years in reading job related materials, doing high quality work, job interview skills, job communications, following directions and taking orders, finishing assignments on time and acquiring the skills necessary for promotion.

Current Students

1. Current students demographically are much the same as the graduates.
2. The majority of the current students (74%) report that they are enrolled in the cluster for career preparation purposes.
3. Of the responding students 2 out of 3 say their current course of study is at least "sort of like" what they want as a career.
4. The current students' plans after high school almost exactly parallel what actually happened to the graduates of cluster programs in the 70-76 time span.
5. They expect to find jobs close to their home community.
6. They expect that being employed in the field for which they are now trained will provide them with an adequate life style.
7. They expect to have difficulty finding jobs in the field for which they are trained.
8. They rate their training programs highly.

Parent's Report

The parents' responses show a very strong similarity to their children's responses.

1. The strong majority of parents (66%) report their child to be in vocational education for career preparation reasons.
2. Parents' wishes and students' plans after high school show a close agreement. Parents, more often than their children, would like to

see their children go on to post-secondary education instead of going on to work or joining the military.

3. Ninety-four percent of the parents indicate they know their child's career decision.
4. Only 11% of the parents reported that they think their child's vocational training is not consistent with the child's career goal.
5. The majority of the parents (85%) thought that jobs in the field for which their children were training are available within 50 miles of the home community.
6. Only half the parents felt that their child will be able to find a job after high school that pays an adequate salary.
7. Most parents believe their child's vocational education to be adequate.
8. The parents (88%) believe that vocational education has had a positive effect on their child's self-confidence.
9. Parents (73%) believe vocational education has had a positive impact on their child's overall attitude toward school.
10. The parents (80%) attribute vocational education as having had a positive effect on their child's overall attitude about work.
11. The parents (90%) reported that they would recommend their child's vocational education for other students.
12. Overall, parents are pleased with their child's participation in a vocational cluster program.

Lay Citizens

The respondents to the telephone survey represent a proportional cross-section of the adult population in the areas served by the twenty schools in the study.

1. Over half (54%) of the respondents had a child of their own or personally knew a child who attended the sample school in their area.
2. Two-thirds of the respondents were aware of the vocational program at the high school, and one-third knew a child who had taken vocational education at the school.
3. Almost all lay public respondents (86%) believe that every high school student, regardless of future plans, should learn some marketable job skill before leaving high school.
4. Almost two-thirds (63%) believe that learning several different skills is preferable to learning one skill.
5. Forty-four percent of the public believe that high school vocational graduates will have to move out of the community to find a good job.
6. Two-thirds of the respondents believe that graduates of the high school vocational program will have the skills they need to find a good job, and only 10% believe they will not (25% are undecided).
7. Eighty-one percent believe that most graduates have a desire to find a job after high school.
8. Two-thirds of the lay public respondents believe high school programs are better today than when they were in school, and 11% believe they are worse.

Vocational Supervisors, Vocational Teachers, and State Vocational Staff

1. The responses of supervisors, teachers, and state staff were very similar. There are no reversals of opinion among the three groups on any of the nearly 100 items in the survey, but there were significant differences in level of agreement or disagreement on some items.
2. All three groups tend to strongly support the rationale for the

cluster concept, but only a simple plurality view the cluster itself as the best approach.

3. Support for the cluster approach is strongest among those persons closest to the operation of the programs at the local level (Teachers, 63%; Supervisors, 59%; and State Staff, 53%).
4. Among teachers those who teach in a cluster curriculum generally show stronger support (72%) for the cluster concept, whereas those teachers who teach single skills programs give less support (35%) to the cluster concept.
5. Teachers in comprehensive high schools give much higher support (69%) to the cluster concept than do teachers in regular high school vocational programs (35%).
6. Two-thirds of the teachers (64%) believe that the job market for most of their graduates will be in a state of change throughout their careers, compared with 100% of the supervisors and 98% of the state staff who hold this belief.
7. All three groups agree that there is little or no articulation between the secondary vocational programs and either secondary academic programs or post-secondary programs.
8. All three perceive generally good administrative support with some weaknesses.
9. All three groups feel strongly that vocational programs are misused as dumping grounds for problem students (66%-88%).
10. There is general belief that the local business community is involved in determining curriculum, but there is evidence of a lack of adequate coordination between curriculum content and demands of the job market.

11. All credit their vocational programs with preventing some students from dropping out of school.
12. There is an overall feeling that students' parents show little real interest in their child's vocational program.
13. There is strong agreement (89%-95%) that inadequate reading and math skills form a problem in the job preparation training for many students.
14. Eight out of ten supervisors report that they have no training in how to conduct job market surveys.
15. Teachers agree (92%) that the course content is left to the discretion of the teacher.
16. There is disagreement between teachers and supervisors regarding the actual teaching practices being carried out in the classroom.
17. There is a sizable minority opinion (33%-35%) that many students will not be able to find a job that pays a decent livable wage.
18. There is widespread recognition that many students are not developing the proper work related attitudes.
19. Most teachers, supervisors and state staff agree that there are enough jobs within a 50 mile radius for graduates to find a suitable job in the area of their training,

Conclusions and Recommendations

1. Cluster Enrollment. The study results show an apparent marked decrease in enrollment in the Electro-Mechanics cluster and a corresponding increase in Construction. Electro-Mechanics may be a more obscure, less well known field of work to high school students. There is an indication of a need for a concentrated awareness and recruitment program designed to inform students of the training and employment opportunities in this and other less well known clusters.

Recommendations:

It is recommended that:

A. A more in-depth look be given to enrollment trends in relation to job market needs.

B. An awareness and recruiting procedure be developed for each cluster program.

2. Employment Status. There is strong indication that cluster training is significantly related to keeping graduates in the active labor force. After three to ten years, 95% of the cluster graduates are in the active labor force. This impact is just as strong for women as for men. Only 1% of the graduates classified themselves as unemployed homemakers, yet over 20% of the graduates in the study are females. This means that 95% of the males and 95% of the females are still in the job market after three to ten years. Also the effect is not confined to traditional occupations for females. Those females trained in the non-traditional T and I clusters are still in the labor force. Given this impact it seems clear that programs should be promoted on the basis of their ability to produce graduates who remain in the active labor force. As a corollary, females should be actively recruited and provided quality training along with the males. They should not be treated as stepchildren in the traditionally male occupations, because their performance as graduates shows a serious job orientation. It is also noteworthy that female students in their comments on the survey instruments showed a generally more positive career oriented attitude than did males.

Recommendations:

It is recommended that:

A. Cluster programs stop selling themselves on the basis of in-field placements and promote their accomplishments in getting young people involved in work, period.

B. Vocational personnel continue to recruit female students, and to encourage their participation in a quality fashion.

3. Field of Employment. Comparison of the results of this study with the results of other studies of secondary vocational graduates shows that Georgia's secondary cluster graduates do as well as or better than the graduates in any published study. The rate of employment in training-related jobs is well within the range of results of other national and state studies. The National Longitudinal Study reported 49% of the graduates employed in their field of vocational training, Project Baseline reported 50%, Conroy reported 27%, and Somers found 25%. The average for all studies is 30% employed in-field-of-training. The percentage among Georgia's cluster graduates is 44% for secondary-only graduates, and 54% among graduates with post-secondary education. Using the federal formula for calculating training-related employment, the figures for Georgia are 54% employed in jobs the same as their training, and 13% employed in jobs related to their training. In terms of meeting the criterion of producing graduates who work in occupations the same as or related to their training, the cluster programs are successful.

However, the data show some further factors that should be considered. In the years since high school graduation there has been a great deal of mobility across occupational lines. Twenty-five percent of the graduates have made major occupational changes in roughly a three to five year period. In addition, only 20% of the graduates state that they will definitely stay in the same occupation in the future, and another 26% say they will "probably" stay in the same occupation. These findings indicate the continuing need for general employment preparation, not specific job training. Students need skills that generalize across families of occupations as well as within occupation areas.

Recommendations:

It is recommended that:

A. The cluster be continued as a primary delivery vehicle for secondary vocational education.

B. Consideration be given to adding the teaching of more tasks that have general application to the world of work.

4. Job Market Analysis. Several different aspects of the study point to a critical need for matching of the secondary vocational training program with demands of the local job market. When graduates who are employed outside the field of training were asked why they were not working within their field of training, they reported job market factors as the reason in 58% of the cases, the largest single reason. Couple this finding with the fact that over 80% of the graduates are going to work and remaining within a 50 mile radius of their residence during high school. In fact, the data seem to indicate that the graduates' desire to remain within the immediate area is stronger than their need or desire to work in the field for which they have been trained. In other words, they stay within a 50 mile radius

whether or not there are jobs available in their field of training. Study results also show that graduates with secondary training only tend to be less geographically mobile than graduates with post-secondary training. Therefore, for the graduate coming straight out of high school and going to work, the local job market conditions are critical to the type of job selected.

Recommendations:

It is recommended that:

A. Vocational supervisors must properly assume the responsibility of analyzing the local job market to find where their graduates are being employed, what the demands of that market are, and then match their curriculum components to the needs of their students going into that market.

B. A standardized job market survey model and procedures be adopted, and all supervisors be given extensive training in that model and procedures.

5. Salary of Graduates. Cluster graduates have been very successful in terms of the income they have been able to make. Graduates coming right out of high school and going to work started at an average first salary of $8,255. Working at a (1976) minimum wage of $2.20 per hour would yield an annual salary of $4,576. Thus a typical graduate of a cluster program began work at an annual salary that exceeded minimum wage by $3,679. After approximately three to five years in the labor force cluster graduates with secondary training only are now earning an average of $12,546. That's an increase of $4,291 annual salary. Secondary-only graduates are currently

earning $686 more per year than graduates with post-secondary training. This comparison should be made with caution, however, because the graduates with post-secondary training have not been in the labor force as long as graduates with secondary training only.

An additional reason for caution in the use of income figures is the presence of what appears to be a strong factor of self-selection among graduates in regards to who decides to go on to post-secondary education, and the unknown factor of what kinds of students are successful in their post-secondary education. These factors will be discussed in more detail in the following section.

6. One-Year versus Two-Year Students. When an analysis was performed comparing students who had only one year of cluster training with students who had two or more years some important significant differences were found. Graduates with one year of training were rated significantly higher by their employers than graduates with two or more years on their ability to read job related materials, to do high quality work, job interview skills, job communications, following directions and taking orders, finishing assignments on time and acquiring the skills necessary for promotion. These seven characteristics relate to basic communication skills and to what may be called a "work ethic". It appears on the basis of these characteristics that one year students are a different type student from two year students. Analysis of the post-secondary education experiences of one year and two year cluster students confirms this implication. One year students are three times more likely to attend college and two and one-half times less likely to attend vocational technical school than two year students. These findings indicate that the

Percentages of One-Year and Two-Year Cluster
Students Who Receive Post-Secondary Education

	Vo-Tech	Jr. College	College
One-Year	12%	14%	20%
Two-Year	31%	10%	7%

vocational technical schools are getting primarily the two-year or more students. The one year students are more likely to go to college or to go directly into the job market after high school. When comparing secondary-only graduates with post-secondary graduates it is important to keep in mind that apparently different types of students are being compared--students with different abilities, different values and different motivation.

Recommendations:

It is recommended that:

An in-depth study be carried out to determine the full range of differences between one-year and two-year students since these differences have some profound implications for the structure and conduct of both secondary and post-secondary vocational education. Some of the important questions that must be answered are,

(1) Given the apparent different abilities and motivations of one-year and two-year students, are the secondary programs in fact serving the needs of both types of students, or are they designed primarily for one type of student and short-changing the other?

(2) Are one-year students gaining from their vocational education experience or are they essentially riding on their superior personal characteristics in communication skills?

(3) Are the secondary programs providing the maximum possible development for two-year students, or are they locking them into a slower pace of development thereby creating a learning plateau below their capabilities.

(4) When the two-year students go on to vocational technical school (post-secondary) is their experience one of success, or are they being weeded out before completion?

(5) In summary, are secondary and post-secondary vocational programs designed to recognize these systematic differences among students, or are they set up to provide one basic approach for all students, letting the students select themselves out?

The answers to these questions are critical in terms of program evaluation, because it is impossible to tell at present whether the apparent impact of secondary or post-secondary vocational education is due to the educational program itself or to self-selection among the more capable and less capable students. It is evident that there is a strong self-selection factor at work, but the nature of the interaction between this self-selection and the structure of the program itself is yet to be determined.

7. Job Finding and Placement. The data are very clear in indicating that the high schools are playing too small a role in this area. Specific consideration should be given to adding a job finding and placement component in comprehensive high schools. This function would serve as a logical complement to an effective job market analysis centered in the vocational supervisor's office. It is estimated, on the basis of the employment experiences of graduates in this study, that an active job finding and placement function in the comprehensive high schools coupled with a closer coordination between the vocational curriculum and the local job market would produce a dramatic increase in the in-field employment of graduates. Graduates are staying in their local area to work. The task for the secondary vocational programs is to identify the types of employment that are available and train their students for the local market, keeping in mind that there is going to be a substantial shifting within and between occupational groups.

   Recommendations:

   It is recommended that:

   A. A standard model and procedures for job finding and placement be developed and adopted statewide.

   B. Vocational supervisors be given substantial training in this function.

8. Cluster Hoppers. Concern has been expressed by teachers and administrators alike about the presence of many students who "hop" from one cluster to another. It is felt by many that these students are a

detriment to the vocational programs. The research data show that among graduates who completed a year or more in any one cluster the percent who had been enrolled in more than one cluster was relatively low (16%) compared to what might have been expected. Furthermore, analysis of these graduates revealed no significant differences between single cluster and multi-cluster graduates in any of the areas measured by the study. The conclusion implied is that among students who complete at lease one year in a cluster, there appears to be no detrimental effect from their participation in additional clusters. Evidence does not support that switching from one cluster to another by students after the first year of enrollment should be discouraged. Switching before a full year has been completed in a cluster may be a career exploration tactic by students unsure of the content of the cluster.

Recommendations:

It is recommended that:

A. Further analysis of the characteristics of single cluster versus multi-cluster students be conducted to determine if there are any systematic differences between the two groups and if there are any implications for program structure and operation.

B. Until there is more evidence to the contrary, students should not be discouraged from changing from cluster to cluster.

C. More attention should be directed toward increasing awareness among students of the content of different occupational areas before they enroll in a cluster.

9. Post-Secondary Training. The research findings strongly support the basic assumption underlying the cluster approach that most graduates will receive additional vocational training after high school. Just 47% of the cluster graduates received formal post-secondary education in vocational technical schools, junior colleges and colleges, but a total of 61% reported some type of post-secondary training. In addition, 88% of the employers reported that the graduates required some type of initial training in order to perform the job for which they were hired.

Recommendations:

It is recommended that:

A. Awareness should be heightened among teachers and administrators that secondary cluster training is not terminal training for the vast majority of students, and secondary education should stress the building of a broad base and the development of adaptability in the students.

B. Students should be informed of the need for additional training and all of the potential ways to obtain it.

10. Students' Vocational Orientation. There is widespread feeling among teachers and administrators alike that many students enrolled in cluster classes are there for non-career reasons. The students themselves report that three out of four (74%) are taking their present vocational course for career preparation reasons. Among parents 66% report career preparation as the reason for their child's enrollment. Accepting these figures as valid indicators, it would seem that between one-third and one-fourth of the students currently

enrolled in the cluster programs are there for non-career reasons. First of all, there is no way to determine in the free entry and exit system that exists exactly what percentage of students could be expected to be enrolled for career purposes. However, there are at least three contributing factors to this situation indicated in the study results.

(1) After review of these related points:

  (a) Only 2% of the current students indicated that counselors or other school personnel played a key role in their decision to enroll in their current vocational course,

  (b) One in three students (32%) said that either they didn't know, or that their current course was not the kind of work they would like to do for a living,

  (c) Teachers, supervisors and state staff alike maintain that vocational classes are used as a dumping ground for troublemakers and problem students in order to get them out of the regular academic classes,

  (d) Over 16% of the cluster students enroll in more than one cluster,

  the researchers conclude that there is no clear and effective strategy for recruiting students into the individual cluster programs. Students are apparently accepted as they come.

(2) Points (a) through (d) above can also be used to support the conclusion that many students are ignorant of or have unrealistic ideas about specific occupational areas and the relation between the content of vocational classes and their eventual job duties. This conclusion is further substantiated by the numerous

comments and suggestions from graduates that course content be made more work-related and practical. Many students are apparently using their vocational classes for career exploration on a trial and error basis.

(3) Teachers, supervisors and state staff all agree that problem students and troublemakers are put into vocational classes to get them out of the regular academic classes. The implicit assumption is that these students can function at an acceptably successful level in vocational classes when they cannot succeed in regular academic classes. In addition teachers, supervisors, state staff, parents and graduates all report that vocational programs are responsible for preventing some potential dropouts from leaving school. Some parents and graduates report that vocational classes are the only reason that some students attend high school.

A careful study needs to be conducted to determine how students with academic and disciplinary problems are performing in the cluster programs and what, if any, impact they are having on the proper functioning of the programs. Comments from many supervisors and teachers indicate that these students are viewed primarily as a detrimental influence in the programs. However, it may be that these students are a proper clientele, and not a problem. In regard to these students it may be that the vocational programs are providing an unintended beneficial service to the school.

Recommendations:

Based on the preceeding points and observations, it is recommended that:

A. A careful analysis should be conducted to determine what kinds of students from the student body are coming into vocational classes, what their motivations and needs are, and how vocational education fits into their long term employment goals.

B. An in-depth assessment needs to be conducted to determine what services vocational classes are performing for "problem" students, what potential services could be performed for them, and what impact they are having on the functioning of the vocational programs. As part of the staff development of vocational instructors there should be a proper emphasis placed on the nature of students at this stage in their development. In addition, instructors and administrators should be alerted to the positive aspects for the student, the school and the community of the successful participation of "problem" students in the cluster programs.

C. A conscientious on-going awareness and recruitment program needs to be implemented, incorporating the results of A and B above, to alert students, teachers, administrators, business and parents to the full range of positive benefits to be obtained from secondary vocational education.

11. Lay Public and Parent Support. Comparison of parents' responses and students' responses showed an extremely high awareness among parents of their children's involvement in vocational education and of their children's career plans (94%). There is also a very high level of approval (90%) among parents of their children's vocational programs. The numerous voluntary comments by parents on their survey questionnaires provide some of the most convincing and articulate evidence of parental support for the secondary vocational clusters.

Among the general public almost nine out of every ten (86%) believe that every child, regardless of future career or education plans, should learn some marketable skill before leaving high school. The public shows confidence in the adequacy and effectiveness of local secondary vocational programs. In fact, they show a greater confidence in secondary vocational education than they do in the local economy. The majority (66%) of the public support the concept of multiple skills training, which is the basic premise of the cluster concept.

Recommendations:

It is recommended that:

A. Teachers and administrators should be informed of the high level of support that parents and the public in general feel for the secondary vocational programs.

B. Parent and general public support should be strengthened and mobilized through local and statewide public relations efforts aimed at more fully integrating the local cluster programs into the economy of the community. This would benefit both the cluster programs, the student clientele, and the local economy. Evidence indicates that there is a need for general congruence between student goals, general employment preparation of graduates, and needs of the local economy.

12. Supervisor, Instructor and State Staff Support. A majority of secondary vocational instructors, supervisors and state staff appear to support the cluster approach; however, the level of support varies from an average of 53% for state staff to 63% for teachers. It is particularly noteworthy that support for the concept is lowest among those persons who make policy, the state staff, and support is highest among those persons closest to the actual program operation, the vocational instructors. This same relationship between proximity and support is true among instructors as well. Support is highest among teachers who actually use the cluster approach in their classes (80% approval in some subject areas), and lowest among teachers who use the single skills approach (35% approve of the cluster concept). In comprehensive high schools, for which the cluster approach was primarily designed, teacher support is twice as great (69%) as among teachers in regular high school vocational programs (35%). The implication here seems to be that support is high among teachers who use the cluster approach in the setting for which it was primarily designed.

Among the vocational instructors 92% indicated that their vocational supervisor gives them the responsibility for deciding what to teach and how to teach their vocational classes. Instructors and supervisors disagree in their responses regarding what teachers are actually doing in the classroom. Only half the teachers indicated taking any concrete steps to coordinate their course offerings with either the local business community or with post-secondary programs. These various points appear to indicate to the researchers a pattern in the relationship between supervisors and instructors which leaves the determination of curriculum content in the hands of the classroom instructor.

Success of vocational education in part depends on harmonizing the preparation of graduates with the needs of the job market in which they will be employed. Nine out of ten cluster graduates (89%) are finding their first job in the local job market, and 81% are still in that local market after three to ten years. However, over half of the graduates went into jobs outside of their field of training. These figures seem to clearly indicate a lack of coordination between secondary vocational curriculum offerings and/or recruitment of students, and the employment opportunities available in the local job market. Primary responsibility for insuring this coordination should rest with the vocational supervisor, not the individual instructors. Yet, vocational supervisors very infrequently (24%) have any training in the appropriate techniques of job market analysis.

The relatively low level of support for the cluster approach among the state staff (53%) is recognized by supervisors and instructors. This recognition is reflected in their comments and by their uncertainty about the future of the program. Thirty-six percent of the supervisors and 26% of the secondary instructors indicate they believe that the cluster curriculum will be discontinued.

Analysis of the responses of instructors, supervisors and state staff indicates that beliefs are well formed among those who support the cluster approach as shown by a consistency of responses on related items. However, among those who do not support the cluster concept beliefs appear less certain and are sometimes contradictory. The lack of consistency and congruency on conceptually related issues indicates that lack of support for the cluster approach is vacillating in nature, perhaps based more on uncertainty, emotional, or political considerations than on the actual success or failure of the programs. In comparison, graduates, parents, the general public, and employers show a higher level of approval and have a greater confidence in the cluster programs than do teachers and administrators. In this instance it seems that the consumers are more satisfied than the producers. There is some evidence of lack of clarity in the communication of state policy to all parties as evidenced by response to specific items by both vocational supervisors (36%) and state staff (47%).

Recommendations:

Based on these findings and conclusions, it is recommended that:

A. As a first step, the results of this cluster study be circulated to all vocational instructors, supervisors, principals, and guidance staff, and to all state vocational education staff. By taking this step all relevant information on the functioning and impact of the cluster programs will be made available to those personnel who are directly involved in determining the successful operation of the programs. This information can act to dispel erroneous information and rumors.

B. There is a need for a program of preparation in the understanding and deployment of the cluster concept for teachers, supervisors, and state staff.

C. Teachers need more preparation and guidance in terms of the physical, emotional, and vocational development of students at this age and grade level.

D. Vocational supervisors need to be provided the supporting skills described in previous sections of this report necessary to assume a new role in curriculum leadership/ management.

E. State staff need further preparation in the rationale and application of the cluster concept.

F. Attention should be given to establishing clear and consistent state policies and disseminating those policies to all relevant personnel.

Concluding Comments

It should be stated that the observations, conclusions and recommendations presented in this report are made with full confidence and without hesitation. However, it should also be recognized that there are appropriate limitations placed on the scope of this study. This was a study of secondary vocational cluster programs. It was not a study of single skills programs, academic programs, or post-secondary programs. All data were gathered exclusively for purposes of this study and relate only incidentally to these other areas. It is not possible to draw any conclusions about the relative impact of the cluster approach as compared to some other approach since this study was by contract limited to a consideration of the secondary cluster programs only. Also, no conclusion can be made about vocational students when compared with non-vocational students, or between secondary vocational programs and post-secondary programs.

All evidence collected and analyzed through the efforts of this study indicates that the cluster concept is having a positive influence on the participating students. The consumers of the system (graduates, current students, employers, parents and the lay public) reported positive views toward the high school vocational education programs. Although only 44% of the graduates reported working in the field of training or in a related field, this ranks above other similar statewide studies and national studies using student reported data. More significant, in view of current problems with youth employment, is the finding that these students either are working (90%) or have worked since high school (99%). Only five percent of all those responding are currently out of the labor market and of that group only three percent are doing so without stating a specific reason.

APPENDIX A

SURVEY RESPONDENT COMMENTS

SELECTED COMMENTS: FORMER STUDENT SURVEY

Vocational education in Georgia is lacking. I took Welding I & II in Florida. It was an excellent course. I learned a lot. Then I came to Georgia. Georgia lacks the vocational instructors and tools and machinery to give proper education.

More subjects should be taught so students would have more vocations to choose from.

I think the opportunity to learn these skills is important whether you use them to earn a living or to fix something when the need arises. I am disappointed in this survey because I use what I've learned a great deal more than I had the opportunity to say.The survey's questions are too cut and dried to give an accurate analysis of vocational education.

Most of the time the student with the B or C average doesn't need or want this kind of training. The student who has a hard time learning from books or the school room type situation needs nothing but practical experience.

Help find students jobs. Let students work part-time during training (actual on-the-job training). Allow high school graduates to further vocational training (inexpensively) after school.

I think vocational training programs should come up with a reasonable way to screen incoming students. When I was at --- in 1974-75, most (at least 90%) of the other guys did not care. They made it very difficult for the instructors and for those who wanted to learn something. Usually, those who did not care were only interested in getting high. If the caliber of students at --- today are anything like what it was when I was there, the ------------ Police Department could make one fair drug bust. My recommendation is to have school counselors ask their quality students if they are interested in a program at ---, and not allow just anyone to enroll in ___ so he can avoid other classes and also be able to "get high" in the free environment at ---. In conclusion, in my opinion it is better to have shops at --- with just a handful of eager students than to have a shop full of irresponsible students interested in acting tough and getting high!

Make it more strict - not enough stress on training for a career. It seemed more like a place to send unruly students to get them out of the principal's hair.

I would like to see students that are not planning to attend college get a chance to take some of the vocational courses. Over half of the students in my transportation class had no reason to be there and had little or no interest!

Strict screening of instructors. I was lucky and got a fantastic instructor - Ms. Helen Thompson, RN. Allow only high school seniors to participate and admit others only if there are openings.

Vocational training can be improved by good instructors, good classroom conditions, good equipment and most of all by good students who are willing to learn.

The best ideas are to have good instructors, good materials to use and a way to help students get a job in the related vocational training he qualifies in. The training is no good if you can't get a job.

Shop projects should be assigned and outside work,school equipment work, and work for the faculty should be forbidden.

Keep it up to date,more on the job training and not so much written work.

More actual work experience rather than in-class training.

In relation to the health professions - needs more time in clinical setting - 2 - 3 days a week - all day.

I don't know of any improvements but when I was attending it the program was well organized and you did all of the work yourself. It helped me a lot in the field of construction. I learned it all.

I think it has improved since I was there. I have visited the class and where things lacked they have definitely improved. Teachers work more with students and the work lessons cover more. Students are allowed to visit hospitals and see things which I never could do.

You could have more instructors, better equipment, and let students work along with people in the same work as the class.

Make it more individualized and promote more funds for better equipment.

To have more teachers or at least smaller classes without so many projects going on that one teacher can't handle all of them at one time.

Find instructors qualified to properly train students for jobs in these fields. Screen students to find out if they are interested in job training or just general knowledge in these areas.

Keep a closer eye on the teachers; some of them were never around when you needed them.

Vocational training would benefit the student more by beginning early in school. The school should do research and give the student job opportunities related to his skill. Make appointments with the employer and help the student to prepare himself for the interview. Vocational counselors would show the student how important it is for him to learn all aspects of his chosen career.

When I took Power Mechanics in high school there was no emphasis on getting an actual job in that field. I took it to learn how to keep up my own car. I found, through a part-time job, that I don't like working on cars for a job but my hobby is restoring old cars for the enjoyment of it.

My classes were always disciplined and provided good study atmosphere. Self-study methods allowed me to pace myself. Most vocational classes were not quite so good from what I heard. I planned to attend an engineering college so I don't expect electro mechanics to provide me with job skills. But it did allow me to learn a little about what Electrical Engineering is like. I also worked on science fair projects in the lab.

Have well-qualified instructors and smaller classroom capacity.

Spend a little time on how to get a job (interviews, applications, resumés, etc.) Maybe a few field trips to industries providing service or products.

More up-dated machines and tools, more shop and class time, more of the basics.

By teaching students on-the-job training rather than just classroom training, vocational training can be improved.

The best ideas are to have good instructors, good materials to use and a way to help students get a job in the related vocational training he is qualified in. The training is nc good if you can't get a job in it.

The program definitely needs some improvements in the areas of more advanced training in different fields such as data processing, business management, business administration, etc., greater demand by parents and teachers for students to advance themselves to the utmost, and some input of different ideas.

We need more tools and equipment for shop use, more up-to-date books on the subject, more information on job openings in the fields of study, fewer students in the shop at one time, and only students who are serious about their work allowed to take the course so there will be more room for them.

More education on paperwork, materials and math, knowing the value of good quality work , getting a good name for yourself by your work, and how to fill out an application, conduct interviews and find jobs.

Two-hour classes were just too long to hold a student's interest. I thought this to be the main problem which may have been corrected. Also more field application of the study and less workbook sessions.

More experienced instructors that know what they are supposed to talk about, more classroom activities on certain subjects, and more outdoor projects to get more knowledge of the field.

We lost about 45 minutes each day of classtime being transported to and from Vo-tech. It should be centrally located in cities so that students can get maximum use of the program. The class I was in needed two instructors - the number of students vs. the number of instructors was too high.

More tools are needed.

I feel that the school or school counselor should orientate all potential vocational education students so they will understand what the program is designed for and how it may be helpful in the future.

Have more than one instructor in a class because one can't show everybody something in a one-hour class.

The instructor was overworked (four courses to teach), therefore he took us at a pace too rapid. I could have learned more if he had gone slower.

SELECTED COMMENTS: PARENTS' SURVEY

I do not know how the training can be improved but he has enjoyed this course very much and has great respect for his teachers. I feel these programs are good for our children, because they help prepare them for their future.

I believe each child should be considered on an individual basis. Counselors should not be "yes men" to the students but should guide them - saying "no" when necessary, rather than completing papers on demand.

Excellent program and great school and very wonderful counselors.

Please place emphasis on the fact that vocational training is not for low I.Q. students but is for those who desire this type career.

Haralson County is in need of a special school of training for teenagers (14 through 18) with learning disabilities. These can stem from home situations, as well as from childhood illness or birth defects. There is much potential in the vocational education curriculum for these young people.

Vocational training has taught my daughter to learn more responsibility, to work cooperatively with others, to be dependable and to think critically. Vocational training can be brought up to state standards and persons should be able to become certified and get state license and be able to get jobs with commensurate pay in their field.

The vocational training is fine, but there are no jobs available when they graduate because employers want someone with experience. The graduate becomes very discouraged and wonders why they take all this training and they can't get a job.

The training has helped in the area of fixing things around the house but he would not like to earn a living this way. Training can be improved by giving more serious work and less trivial tasks such as dog houses, tool boxes, cutting boards, etc.

Made the graduate realize that although he has natural ability, he needs direction and training and some sort of certification from a recognized course of training. I believe the academic requirements should be more stringent. My son is a poor book student and cannot understand why he needs English to be a good carpenter or electrician.

I believe that the instructors should have proven themselves by actual experience in their field, and not just by a degree. Students should be required to maintain at least a "C" average. This generation and others to come need more emphasis on courses connected with their specialized study.

Of four children, only one was college material. I cannot say enough in favor of more and better training of the type my child has received at OEC. I regret it wasn't available for my other children.

Vocational training has given him an idea how physical work can be. The training is good, but it seems that skipping class is easy.

My son is eager to work on construction jobs and does a good job. Training can be improved by obtaining better material to work with and offering vocational training for adults at night with son.

If it had not been for the OEC program in DeKalb County, my son would have quit school at age 16. He has always enjoyed working with his hands. He has never liked "reading" subjects in school . He has truly found his talent at OEC. Excellent program.

Suggestions for improvement in the training program are: 1) more contact between parents and instructors. Periodic conferences would be a good idea. 2) Academic subjects such as English and math should be related to the vocational program such as business English rather than Literature, business math rather than Algebra,etc. 3) The advanced vocational student should be given "on the job" training, help in getting a job, or help and encouragement in getting admitted to an area technical school 4) more communication between teachers, students and parents in regards to planning the student's future. "Long range plans" should be made with regards to the student's aptitude in mind. As a parent of an O.E.C. student who has attended for two years, I feel that I really have not been informed at all about my son's talents, weaknesses, job potential, attitude, classroom work, etc. although I have requested phone calls and conferences many times.

Vocational training has improved my child's attitude toward doing a professional job rather than just doing a mediocre job. I feel that most of the participants in the program, however, are those who have difficulty in basic subjects such as English, math, etc. The program needs outreach to attract the higher achievers as well as the marginal.

I think more effort should be put in the school to show students and parents what vocational training is all about. Many parents did not even know there was such a program. I would also suggest reaching out to the student body because many have the idea that only "dummies" or bad students are enrolled in the vocational programs.

Vocational training has kept my son in school and taught him an excellent trade. I have nothing but praise for the program and his excellent teachers.

I think vocational training should be mandatory for all students 10th grade through graduation. My daughter was losing interest in school until she started.

The school should help find work for the graduates in their field.

The length of courses should be extended and equipment could be improved - newer and more varied.

My son has more interest and curiosity about discovering the correct way to do things, but he needs far more training. Most students have a special field in which they excel - this field should be found and pursued.

Although vocational training has had a good effect on my daughter, I don't feel I know enough about it to offer any ideas for improvement.

Not everyone is an academic student. They should encourage this program for those who aren't. It has given my son the best opportunity he has ever had - it has made him a better person and has helped him choose a profession.

Vocational training has had very little effect on my son. He had to switch courses when electrical was withdrawn and his interest dropped.

We need greater communication between teachers and parents if indicated by students' attitude and/or performance. The program has given my son pride in having an additional choice of employment.

My daughter enjoyed the course, but I feel it was totally useless. I don't think she benefited at all, other than having an easy course. However, I would not want to judge the whole program by this one course.

More principles, theories, and concepts should be taught prior to concentrating on hands-on training.

Vocational training has helped my daughter to see the importance of a trained approach to a career and also helped to develop a mature outlook on job preparation.

These classes are what gives the labor class/working people a chance at a decent job. Without training you don't have a chance. In my son's case, it is what is keeping him in school. A good idea would be for representatives of outside jobs to come into the class for job-related experiences and to have field trips related to the type of job the student is training for.

A co-op program with local industry to give actual experience on the job would improve the training program at the high school. The instructor has had a good personal effect on my son's attitude about himself and his capabilities.

Some sort of evaluation sheet is needed periodically to let the parents know what is being done.

The program should have trained nurses show the students what the profession is all about and what they have to face if they choose nursing as their career. The program improved my daughter's attitude toward working.

I think that there is a very definite plus in vocational training, especially since the average high school senior doesn't really know what type career he would like to pursue upon graduation. It has improved my son's self-confidence in being able to compete with others upon graduation.

Have the academic classes not so hard for vocational students - let them have strictly a vocational school.

My daughter wanted to be a dental assistant. By working in a dentist's office she found this isn't what she wants to do. Her chosen field is medical and she has decided what she wants to do. I'm thankful she had the opportunity to make this decision before graduating from high school.

Classroom training is good. OJT Training was poor. The employer did not take time to do any training. I think the employer should be well informed of vocational training programs and willing to do his part. Employers' indifference and non-support is very discouraging to student and could damage the program. I think there should be more organization - sessions with the teachers, employers, students, and administrators should be held before the student is sent to the job. I feel they are sent "blindly" into the job which makes it hard on all concerned. No one know what is expected. This is definitely a weakness on the part of the teacher and vocational coordinator.

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Keep up the good work that you are doing because it has payed off for my son. It helped him and he really enjoyed the class.

Vocational training has helped my daughter to have more awareness of situations unlike her own and has given her insight to a world outside of "school"; altogether helping her to grow as a person and become a more well-rounded individual. I suggest: offer more courses, have more instructors, more emphasis within the high school encouraging student participation which will prepare them to earn an income upon graduation. This will give them more confidence and some direction while they are still too young to decide on a lifetime career.

Vocational training has given my son the opportunity to learn what types of work he likes and more importantly, the opportunity to find out the type work he doesn't like. They need more modern textbooks and lab equipment and to provide refresher training for the instructors to keep aware of the new developments in the fields, especially in electronics. One of the biggest problems I see with vocational education is the poor image it has . The feelings and statements by teachers and counselors indicate that vocational education is for those who are too dumb to do the academic work. The solution is not simple, but it is necessary to upgrade this image. The students who graduate with no vocational training and do not go to college have no saleable skill, but the student with vocational training at least has a place to start.

I feel it is very important for young people to do things with their hands and think you all are doing a great job giving them the opportunity. It has helped my son have more interest is school in general. I am very grateful.

TOTAL COMMENTS: VOCATIONAL SUPERVISOR SURVEY

The cluster programs or modifications of this concept are good and how I feel high school vocational education should be. However, we cannot be expected to be evaluated on the number of specialists we produce as currently being proposed by federal law. This is not our mission or primary purpose, I feel. The existing structure of our high schools will not permit this.

The teacher must understand the full concept and accept the full responsibility in making individualized education effective.

High school vocational programs are placing too much emphasis on job preparation rather than career exploration. At present we do not have adequate equipment, student selection processes, nor placement services needed for this concept.

There needs to be a clear definition and rules for comprehensive high school operation.

The cluster concept exists in somewhat of a paradox. It assumes like most vocational education that tenth, eleventh, and twelfth graders are ready to make that final career decision. This is not true or practical. Yet the federal government requires we plan and evaluate as if this assumption were true.

We are moving the masses in the right direction.

Should we provide more in-service workshops for instructors of T & I cluster programs in areas they have inadequate background of training?

At least for the present I feel this is the way to proceed; this is especially true when greater articulation is realized.

More training needed for vocational supervisors in individualized instruction.

The cluster concept is great, but finding teachers who are well versed in all areas of cluster is very difficult. They tend to teach those areas they are most familiar with.

Equipment and supplies limit the potential of the cluster approach.

I think the cluster is excellent for 8th grade level students. Orientation and exposure to our generalized vocational program has been very favorable. We change the subject areas of the cluster every other year if possible.

Materials, instruction and support are generally available. Confinement to school responsibilities and scheduling of workshop on our part seem to be most limiting factor. I support cluster and career exploration.

I think it is fine but does not meet federal laws.

Cluster approach is sound. High school programs should be one year programs. Student should complete as many different one year cluster areas as possible while in high school. Vocational technical schools should be operated as an extension of high school to provide in-depth training in areas of interest. Student will be able to discover his interest tnrough this plan which will result in: 1) placement on job for which trained and 2) more likelihood of longevity in trained field.

Change it to single skill.

We need more training sessions for teachers on the use of individualized instruction.

To adequately prepare a student at job entry level and be responsible for placement, a single skill approach should be more successful.

The shop teachers do not receive sufficient preparation for the implementation of individualized instruction and in class management for the cluster approach.

Individualized instruction seems to work only with motivated students. It does not work with average and disadvantaged students. Most instructors don't have the organizational ability to properly manage individualized instruction.

I have not decided whether or not this is the best approach. I look forward to survey results.

It can work with dedicated effort and time on part of instructor and supervisor.

Clusters are not conducive to quality vocational instruction due to the major abilities of the instruction exist in one aspect of the occupation. They do not possess for the most part adequate experience and skill in all of the associated occupations of the cluster to effectively train others. The training provided to alleviate this is not sufficient and is not close to being equal to two years actual work experience.

Clustering: Does not lend itself to the aim of vocational education in secondary setting. Specific one-skill training is needed to give the skills needed for immediate employment after graduation.

The cluster concept is great but in practice almost impossible to manage with one teacher. High school students lack the necessary motivation for individualized instruction which is the most necessary component of the cluster concept. When we learn how to teach motivation then we might improve our track record.

I believe the cluster concept at the secondary level is more beneficial to our students than a single skill concept. It should be retained.

Teachers are lacking the skills to do a good job in teaching the cluster programs. In teaching the cluster programs the teacher is learning along with the students.

I believe in the cluster concept if it is used for exploratory purposes. It allows the student an opportunity to see what takes place in the various occupations. But if we will have to continue under the placement concept, I feel it will be necessary to change to single skills.

We need more career exploration!!

Some parts of the cluster individualized programs are adequate to cover the subjects. However, many programs are not completely developed or are of poor quality. Many instructors have had inadequate instruction on the proper way to use these materials. Example: Have problems getting slides in correct sequences to correspond with the program. Some programs need revision and beefing up.

Difficulty in obtaining individualized instruction teaching materials, particularly in the Health Services Occupational Area - none thus far in Health Services.

Some cluster areas are generally too broad, i.e. Transportation with auto mechanics, small engines, marine engines, and diesel mechanics.

We have most of our teachers doing a good job setting it up. We had a great deal of run-around from Athens but seems to be better now.

Too many of PLACE packets I have are worthless.

TOTAL COMMENTS: STATE STAFF SURVEY

Individualized instruction is only one method of teaching - it cannot be used 100% of the time.

The cluster approach utilizing individualized instruction is the best approach to meet the secondary training needs of Georgia's High Schools.

Learning Activity packages are not being utilized to a great degree. Many teachers will say they are using them but in visiting schools you find this really not the case in most instances.

Most teachers are not prepared to handle all areas required of them. Many T & I teachers lack professionalism.

I do not believe that clusters are significantly better than single skill programs when using job placement as the criterion. I believe that a far greater percentage of students are better served by single skill courses because:

1) They can become employed.
2) They advance on the job.
3) Program completions are likely to keep their interest on the job.
4) Clusters as operated make post-secondary training necessary.

I feel cluster programs are most appropriate at secondary level. Training at post-secondary should be more specific.

I do not believe the cluster approach is true vocational education. Single skill course work will provide a much better product.

In general, local agencies are doing exceedingly well with vocational programs.

I feel that greater emphasis should be given to cluster programs in teacher education institutions.

This is a good program.

This is the best we can do with the teacher allotment and facilities and equipment provided.

The cluster program appears to be a good vehicle for teaching a broad range of related job skills. In today's job market (transitional, changing), the cluster concept is more appropriate than teaching only one or two specific skills.

High school programs must be program specific and train youth in a job skill adequately for that student to be competitive in the job market; a marketable skill must accompany a diploma. That skill can be pursued while the employee upgrades that skill, pays taxes, becomes productive, and makes decisions about the future. A cluster of skills amounts to about one quarter of several things, none of which make the student employable.

Does this study intend to show the relationship between the cluster approach and individualized instruction?

For some students the cluster concept is the answer, especially for those who have no idea what occupation they are interested in. A student in high school who knows what he/she wants (machinist or nursing) would benefit from single skilled training. Teachers need to utilize all methods of instruction as needed, for instance, sometimes students need dialogue with the teacher in a group setting as opposed to individualized instruction.

Individualized instruction is the best mode of instruction when necessary materials, facilities, numbers of students, qualified instructors are available. For high school programs, the cluster approach is by far the best approach.

It is impossible to predict to an acceptable degree of accuracy which of the thousands of jobs students will choose. The cluster concept broadens the field and makes the prediction acceptable.

I support the cluster concept. I believe most high school students are not ready to finalize their career objective. In-depth skills are needed when this career choice is made. Provision should be made for students to have access to updating skills as needed for new job opportunities as they arise.

Continue both.

I believe the cluster concept in the secondary schools can give an individual student a perspective as to what avenue they would like to pursue - In my opinion this may be a good concept.

Basically, I support the cluster concept; however, I think that there should be room for more concentration in a particular skill. Additionally, I am concerned that programs operate around the particular strengths (or weaknesses) of the staff.

Having numerous years of experience in employment counseling/programs, the problem I most often identified is that job applicants lack attitudes conducive to successful employment, i.e. respect for authority, pride in quality, belief that an individual's actions are the most important determinant of consequences.

The cluster program approach to vocational education leads to exploratory vocational education and is not in most cases designed to lead toward job placement. We must develop solid programs with the ability to provide a sequence of courses designed and developed that lead toward job preparation and job placement.

SELECTED COMMENTS: VOCATIONAL TEACHER SURVEY

In Cluster Programs with one instructor, teacher tends to lean toward his favorite subject; with more than one instructor, there is often a conflict of personalities. Most of my T & I students have poor citizenship and academic backgrounds.

Cluster programs are good for high school, but need better support from guidance people and other administrators. Many parents seem to hold onto the college syndrome of thinking their child needs college to make a living.

Vocational education seems to be a bastard child in the eyes of school board. Our county coordinator is real active and strong, yet the vision of all members need correction. Stronger emphasis by the heavies would help our program. Who will build our MD's houses?

The Cluster concept is not appropriate for some vocational courses nor is it beneficial for the students, especially if the goal of high school voc ed is entry level skills. There does not seem to be any standards for the high school voc ed programs as to goals and objectives. Each district and each school seem to have their own program, many times unrelated to other programs in the same field.

I feel that in order to do the best job I can, I need either a planning period (one less class period) or an individual (s) to aide in organizing the individualized program in my class. Time is short and too many things are unfinished because of this.

It is well for the student to be exposed to the Cluster but also in my estimation his interest may be in one particular area and the imposition of one or more areas can cause him to lose interest in all areas due to the fact that he cannot cope with all three areas.

Most of the students I get cannot read above 4th grade (level). They seem to be the students no one else will take. I feel this hurts the overall program by not being able to place these students into related fields.

I believe we have an excellent program. Our main problem is that so many of our pupils cannot read well. We are working on this.

The Cluster concept is next to impossible to implement properly in a limited space, without proper equipment, with a full 6 period day, without a planning period, and with only one instructor. All planning has to be done at home, on the instructor's own time. You've been told the same thing, repeatedly, that individualized instruction would be fine if you had all the equipment needed, and the same caliber of students, especially those capable of reading and writing, which some other programs in the school have. I'm not at all sold on the PL 94-142 law which mainstreams handicapped and other impaired students. I realize that all handicapped need assistance, but at the same time this law penalizes the regular student because the instructor cannot give the time needed to properly assist all students - Yet we are expected to place so many graduating students each year!!

We need pre-prepared individualized learning packages desperately! Not only for nursing but for various work fields. These packages must be adaptable to the general classroom environment and must include more than the basics - those I have seen are too remedial and too basic.

I feel that the Cluster program is ideal for Health Occupations and that individualized instruction is a must for the cluster concept. However, class size needs to be reduced, more funds need to be available for materials and equipment. There should also be a one-hour introductory course including proper work attitudes for all students and a one-hour planning period for all vocational teachers in addition to the extended day planning period. Too, vocational teachers should not be allowed to or subjected to have homerooms.

Concerning Higher Education - I do agree employees should "stay up with the times" but not at my financial expense. I am a family man and can't afford "to pay" to get my pay check! I can sacrifice time but not money! I feel the best way to upgrade my teaching abilities is to help me get summer employment for nominal pay, not course work where I pay!!!

In my opinion, the teacher is the key to the success of teaching the Cluster. He/she must be qualified to not only do the necessary skills but also be able to teach the skills included in the cluster. This type of teaching presents a definite challenge.

Our program is only in its 3rd year but this year the idea seems to be catching on. We are getting better students who are seriously pursuing job skills - also we are getting support from counselors and academic teachers.

We do not have sufficient cooperation between state program developers and instructional departments in curriculum areas - locally the reproduction of items required to build and file an individualized program is curtailed due to excuses of "limited funds for teaching supplies". A satisfactory copier and an understanding vocational supervisor who could help coordinate the teaching process administratively would be of immeasureable help. Being able to get a program of instruction that can be used without 2 years of work in trying to correct mistakes and bad tapes and replace slides that are not relevant to equipment in the lab would help also.

I think it is really helping our society teaching vocational education in our high schools. The Cluster method gives my students a selection and an idea of what they want to do when they graduate.

I believe everything taught should be vocational whether it is English, math, science, or typing, drafting, etc. The separation between academic and vocational should not exist. The "academic" people are missing a lot.

The field of Electronics has changed more in the last ten years than any other field. There has been no funds made available to up-date our equipment. I feel this is unfair to the students and the instructors. If these programs are not continously updated they might as well be done away with.

The Cluster system works good on paper and in the state department but it is ineffective in the classroom with 20 students who don't care.

Vocational education in our schools cannot minister to M.R. students. We are not miracle workers - we cannot take "all" goof-offs and dropouts and make solid citizens out of them even though we try. Sometimes too much is expected of Vocational Education.

My homeroom has more students than desks and the extensive paperwork with a large homeroom cuts down on time needed to contact Health Agencies where my students are placed. Also pre-registration and registration use several days per quarter which also cuts down on needed time in the community agencies.

Not any of my 56 students wanted small engine repair or marine engine. They wanted to know about auto mechanics - how to tune a car or work on brakes. Individualized instruction cannot work in my small shop with 26 students for two hours a day. I have one class one hour a day; they only get about 35 minutes of work after roll call or notes.
One instructor is definitely not enough for auto mechanics - supervising 26 students for different activities being done. Don't let 9th grade students take shop. I have to scrounge or buy from my own money training aids, films, filmstrips, charts or posters because the school funds cannot buy them. Excuse: "No funds". I had to pay out $360.00 from my own pocket to buy educational material to teach my program successfully this past year. This is not right.
The state should establish more rules for shop safety - provide more material to vocational shop teachers. In my area good mechanics, tune-up and brake repair mechanics are in great demand. I think the Cluster concept will not work out. The material of A/V issued to me from the University of Georgia

wasn't complete for the transportation cluster program: the auto mechanics program should be included in this packet for the transportation shops.

In the small schools of Georgia the cluster concept is essential. Since you could not fill a class of specialized study due to small enrollment and apptitude levels, the cluster concept allows you to reach students of different levels.

The majority of my students have a very low literacy level. I have trouble deciding how to teach individualized instruction to students who read at a low grammar school grade level.

The Cluster program can work, but it requires a much higher level of coordination, administration, and supervision than it presently receives. Many students are not aware of the intent of the cluster program, nor is there much publicity of its content or purpose. A state-prepared/distributed brochure should be made available to all vocational/comprehensive high schools. This brochure should be given to all students entering the ninth grade, and re-emphasized each year. Too often guidance counselors are academic-oriented and have little involvement or interest in vocational education. All high schools with vocational programs should have a vocational counselor assigned with the prime objective of creating an effective p.r. program.

I'm so frustrated I can't comment.

I like this program because it allows the gifted students to go into a higher level of training.

My students show a lot of interest in the skills program, more so than the regular instructional program. My students are like most students - unless highly motivated, they don't care about future plans or careers. They just want to get out of school.

Cluster programs were poorly developed by people who had never taught high school students. Individualized instruction does not work because students must be self-motivated and my kids do not work at all unless I stay right with them.

I would like to implement some form of clinical experience into the high school program. This would enable the students to gain a more realistic approach to Life Role Skills in Health Careers.

I think too much is expected of students who have only 1 or 2 years in vocational education. They need more training for better jobs in life.

The cluster program will be good for Georgia students.

More funds must be made available for acquisition of materials that cannot or will not be donated by industry.

One thing I am concerned about is the job placement. Who says the magic number of completions of this course is 50%. Then 50% of these completors are placed on the job. I still contend that one of the most important things we teach is the ability of a student to choose or decide if they can or cannot conquer a skill. It is important to know if a student can or cannot accomplish a skill.

I think the apathy and permissiveness of parents and the public in general has lead to the attitudes of our present day students. Too many have been promoted socially and therefore are not ready for the later grades in high school when they have fallen so far behind in age and class.

It is very difficult to teach a cluster program when you have very little and/or no specific training in certain areas of the field.

I don't feel that there is enough guidance, resources, or approaches conducive to my area of instruction. Also, my physical environment is not conducive to the "individualized instruction" method.

More funds made available for local purchases (special items - materials, tools, etc.). Better stock of related films in state and local film libraries.

Many of the clusters have too many only slightly related occupations under our heading. Also, there is not enough time in a student's high school career to cover a single cluster.

More screening should be done before signing a student for cosmetology. Most students have no intention of becoming a hairdresser; they want to come because they think it will be fun and no work.

I think vocational education in Georgia should be taught by single concepts. You can teach the cluster by taking single concept and spend a quarter on it. It is impossible to teach several things at one time and do a good job.

No cooperation between secondary and post-secondary in giving a student credit for what he has already had.

Individualized instruction is not a "prepackaged set of materialized software". Individualized instruction is not going to become a reality until class load is reduced so that one to one instruction between student and teacher can take place.

It works well in some parts of my course but not in others. I depend on the subject material and the level of the student. Some students can take individualized and some can't.

Supervisor doesn't allot supply money to all departments equally.

I am not satisfied with my program but I think the cluster concept is workable in my situation.

Need more money and lower student/teacher ratio for better education. With some high level changes high schools can easily be up to par as Vo-tech schools.

The individualized study is very high in consumption of costly materials and tends to be boring to students. They had rather work on live work and see a finished product.

Need more than one teacher when teaching cluster programs.

Students should specialize more.

Vocational subjects should be offered by the quarter and a student should be able to stay in class all day. Example: Fall quarter - academic only; Winter quarter - vocational only.

Does not meet needs of students.

It is hard for 1 instructor to teach the cluster program. He needs an assistant.

If we are to become individualized and use the place packages developed by the University of Georgia, each instructor must have enough slide trays for all slides to be permanently placed in an order for the program to work.

Local monies are not enough or allotments for tool replacement aren't enough.

I like the cluster programs. I think that it could be improved in certain areas.

Should have smaller classes, maybe 15 per class. Should teach more public relations or customer relations.

Too much emphasis is put on the individualized place package.

Need the tools to teach with: books, workbooks, handtools, and machines.

A more realistic equipment/student ratio.

Cluster program is not designed for cosmetology. I teach all or the entire program must be taught. There is no way you can sub-divide this program because of the mandates of The State Board of Cosmetology. I think it should be taught as set forth by the State Board of Cosmetology.

Articulation between secondary and post-secondary should not be a problem if they would follow the individualized instruction program. At least this would give them a generalization of what a student has had if he/she does not receive all their unit hours. A system is included for grade sheets that could be copied and sent along with transcript to show the instructor just what progress student has made. I do not understand why the schools are not required to teach on the individualized instruction plan after the state has spent money to have it developed. It can be effective if used properly and it should be updated twice each year to include the new trends. Workshops should be held for the teachers to update their program and money should be provided for them to do so. Courses should be taught on at least a three hour block and students should be allowed to stay longer if they can, that is, if they can take another class elective. Especially those students that you know are going into the profession. Each system should have a vocational counselor or all counselors should be required to take vocational careers before being certified. If I do not feel comfortable teaching a certain area, then I as an instructor should improve my skills in this area so I could teach it well (if it is a required part of my program).

Semester systems hurt our program. High school is too small for cluster program. Lack of superintendent's interest and support. Too much emphasis placed on VICA.

Too many students per class.

I believe we should continue the cluster program. This survey appears to be skewed by the author.

In small town areas, we have problems being able to place students in businesses with a small salary provided for their services. My class works and observes in the local health facilities which will cooperate. Transportation to and from the work stations is my responsibility in my car. Something needs to be considered about this matter. The class I have to limit to 15 or less due to this. Then, two trips are usually made to drop them off and pick them up.

The cluster concept is difficult to teach but is necessary to give students a greater opportunity to find a job after graduation.

Class load should be decreased to twenty students. So teaching would be more effective. That's my main pet peeve.

Student should not be considered a completion until they complete two years in the program; they have to complete at least one in secondary year in machine shop or welding or sheet metal 6 hours a day. We have them only two hours and teaching three skills. To teach a maximum of 12 students on an individualized basis would give you ample time for each student; with 20, some just have to be ignored if you do your job properly. Classes should be set up differently. We should have at least 3 hour classes:by the time a student gets set up , it is time to tear it down and check in, clean-up, then get ready to go to his next class. Also, a one hour orientation class for the first year student would be extremely helpful.

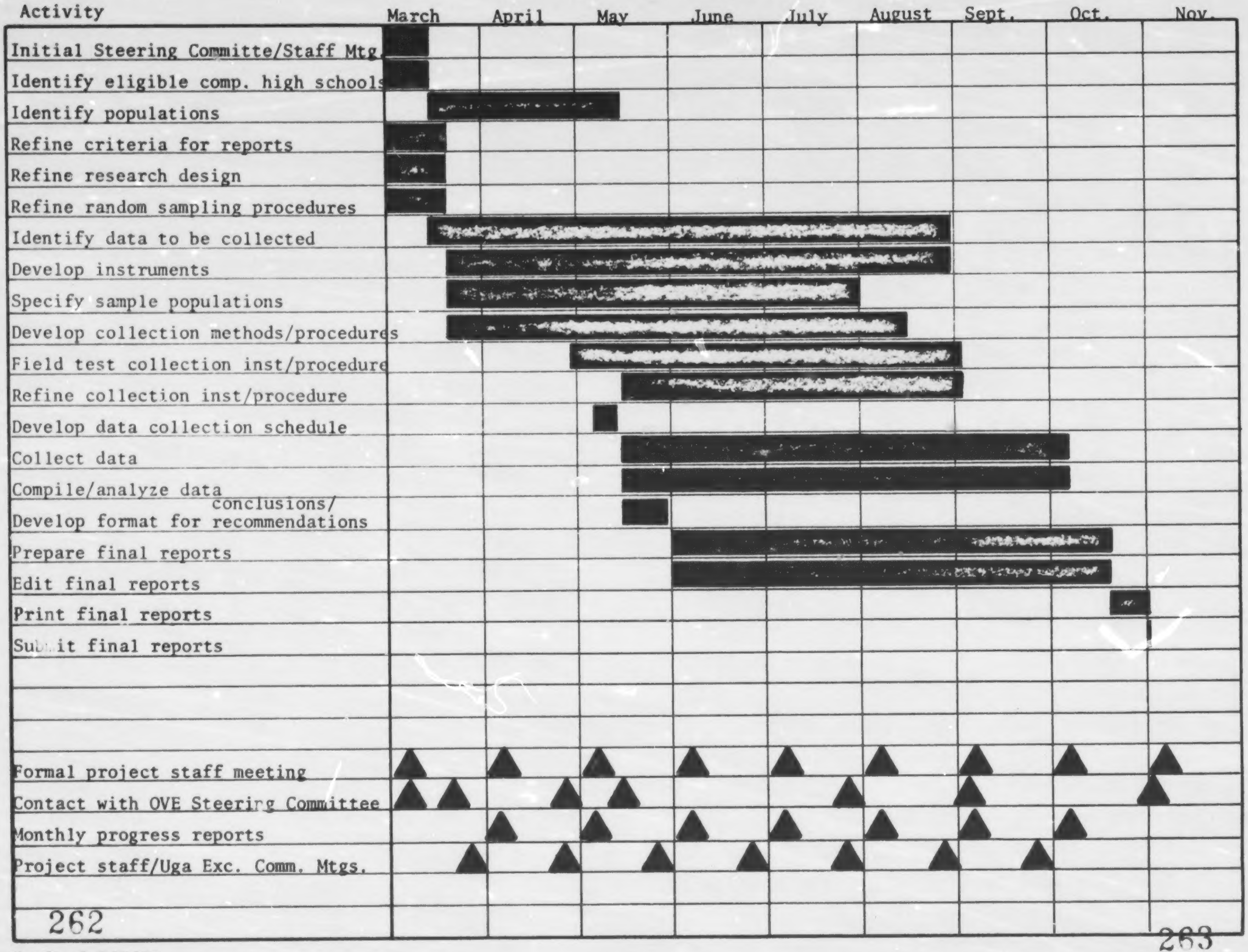
APPENDIX B

PROJECT SCHEDULES AND CONTROL CHARTS

Gantt Chart

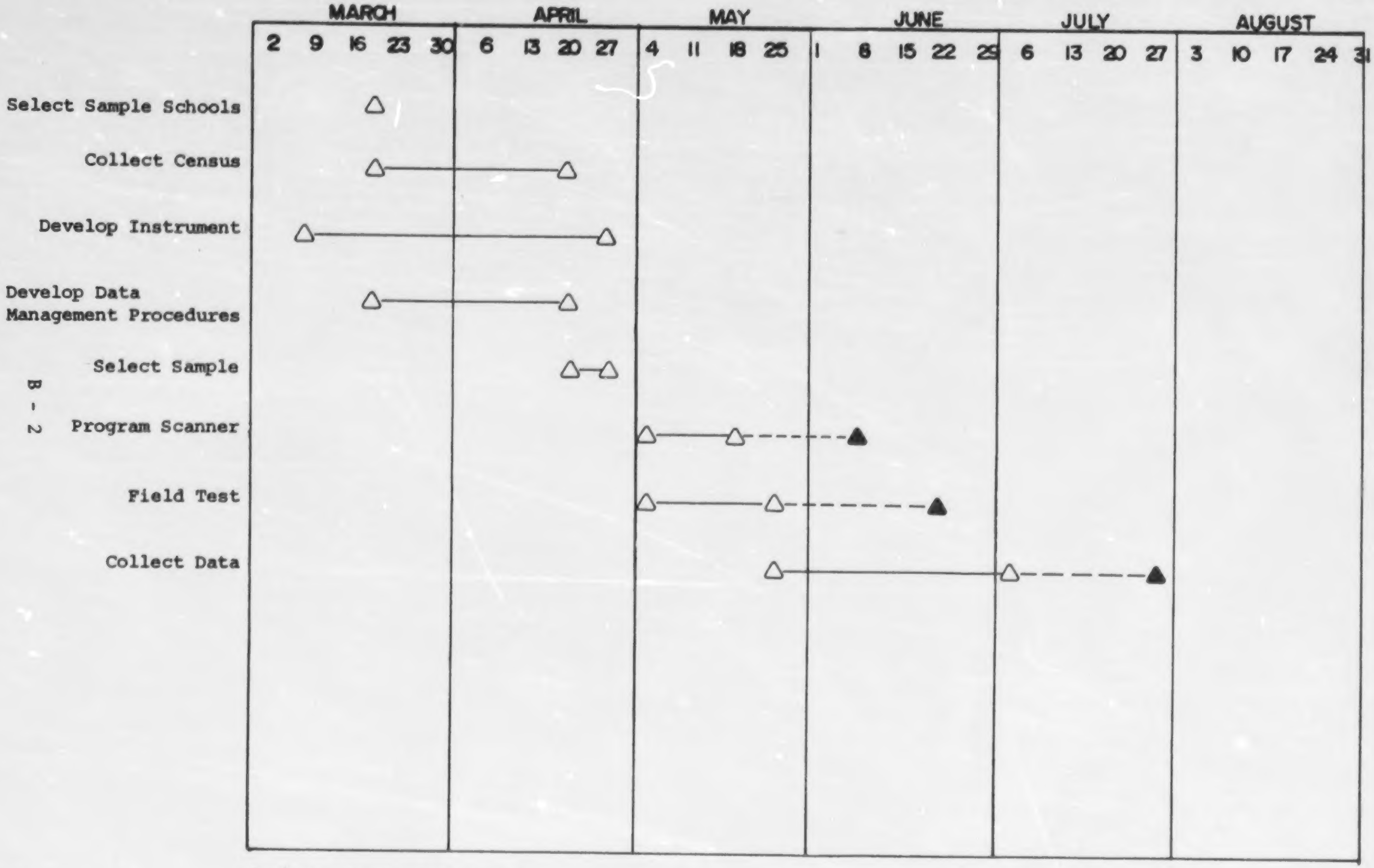
Activities Schedule

From March 1, 1979 to November 1, 1979



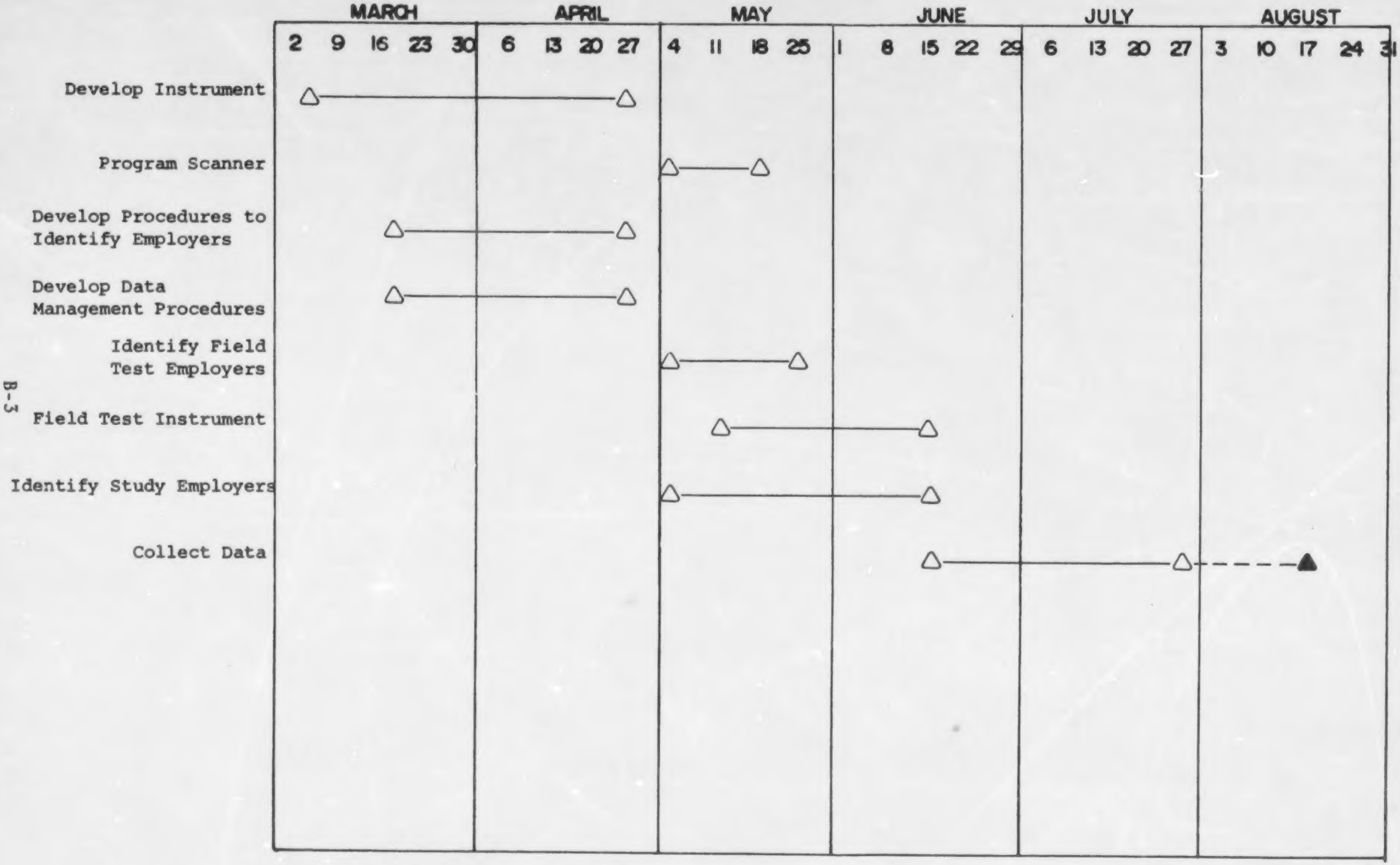
Revised 3/7/79

POPULATION 1: CLUSTER GRADUATES



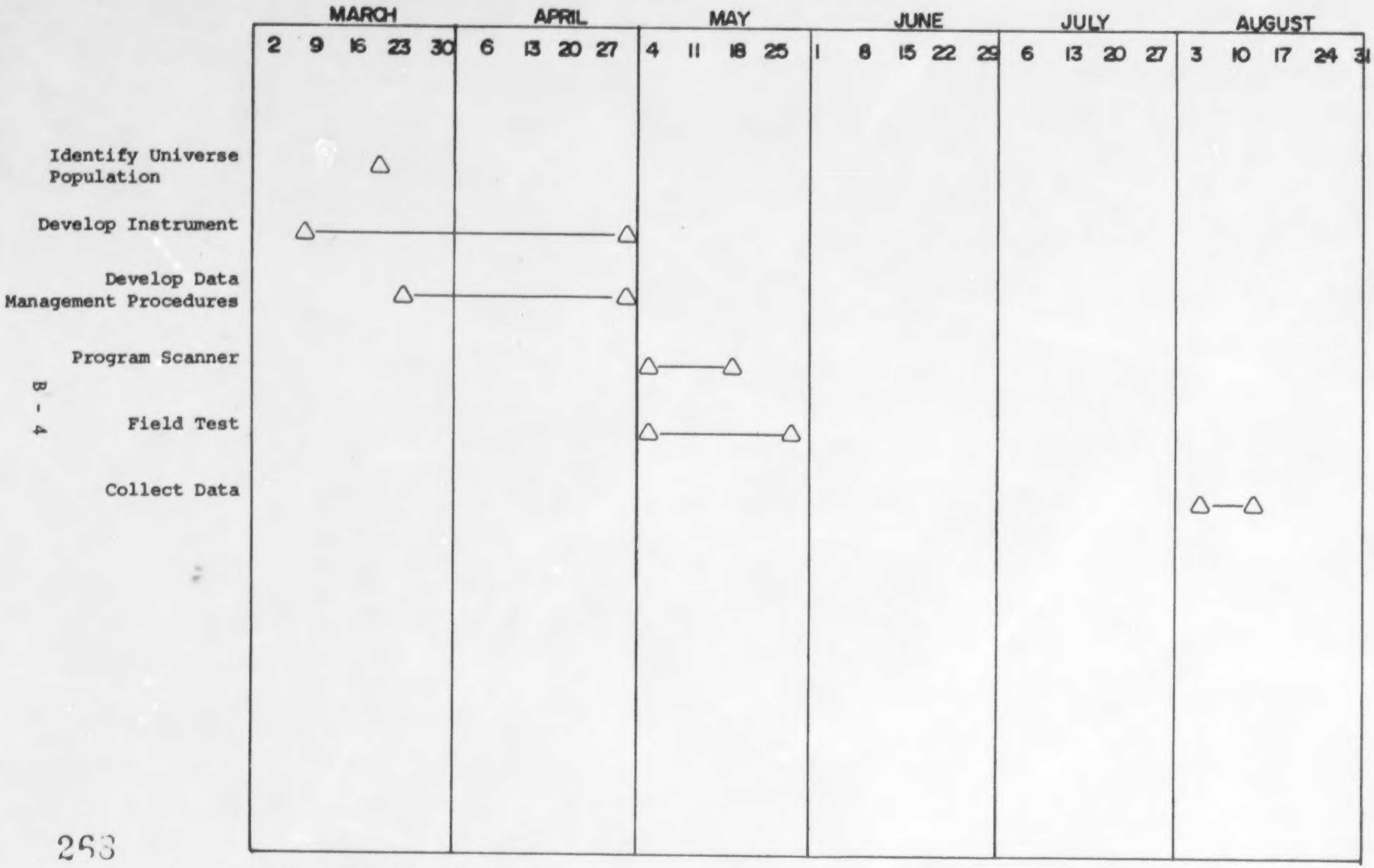
△-△ Scheduled period for task.
--- Possible extension if necessitated.
▲ Last possible date for completion.

POPULATION 2: EMPLOYERS OF CLUSTER GRADUATES



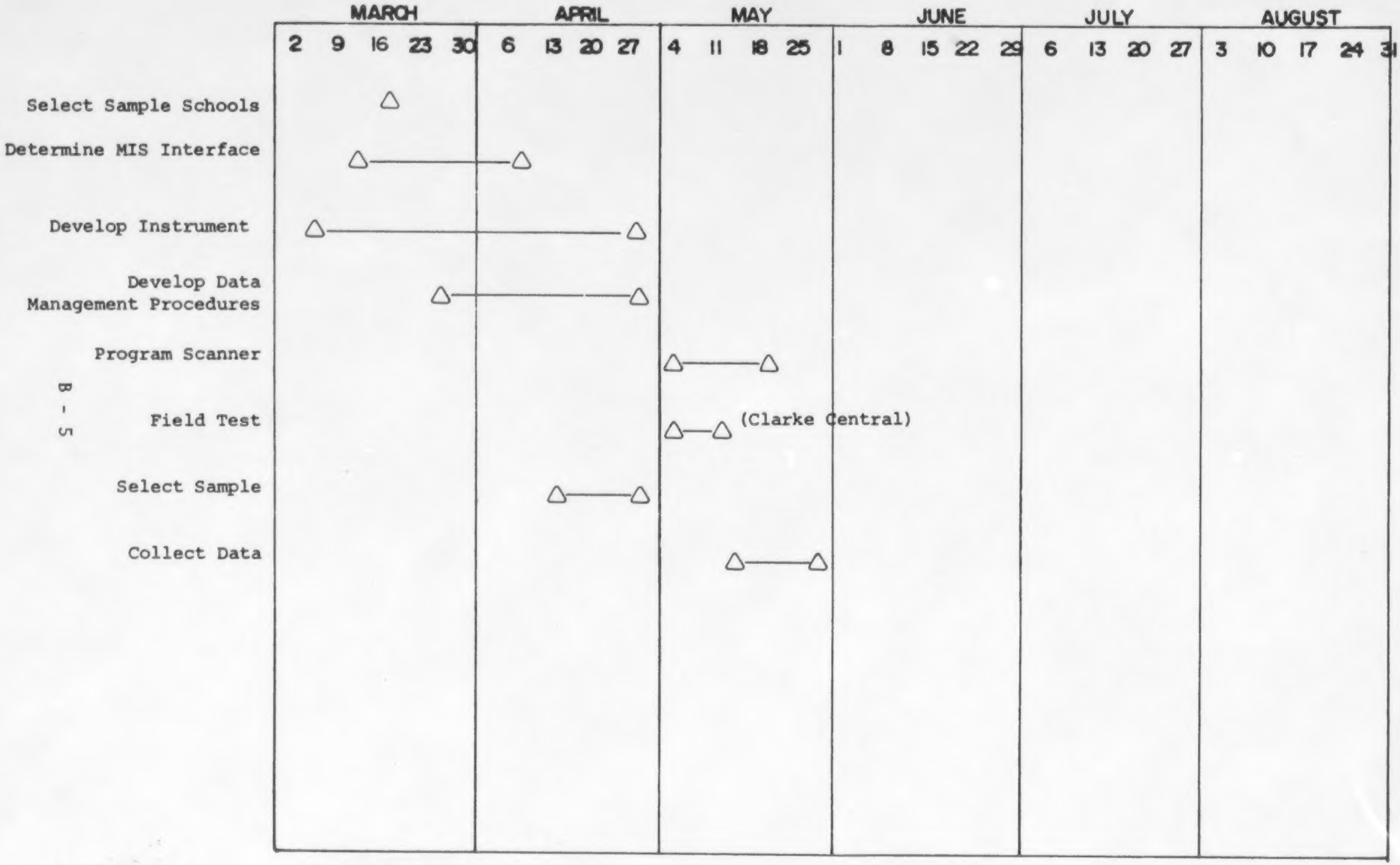
△-△ Scheduled period for task.
--- Possible extension if necessitated.
▲ Last possible date for completion.

POPULATION 3: VOCATIONAL SUPERVISORS



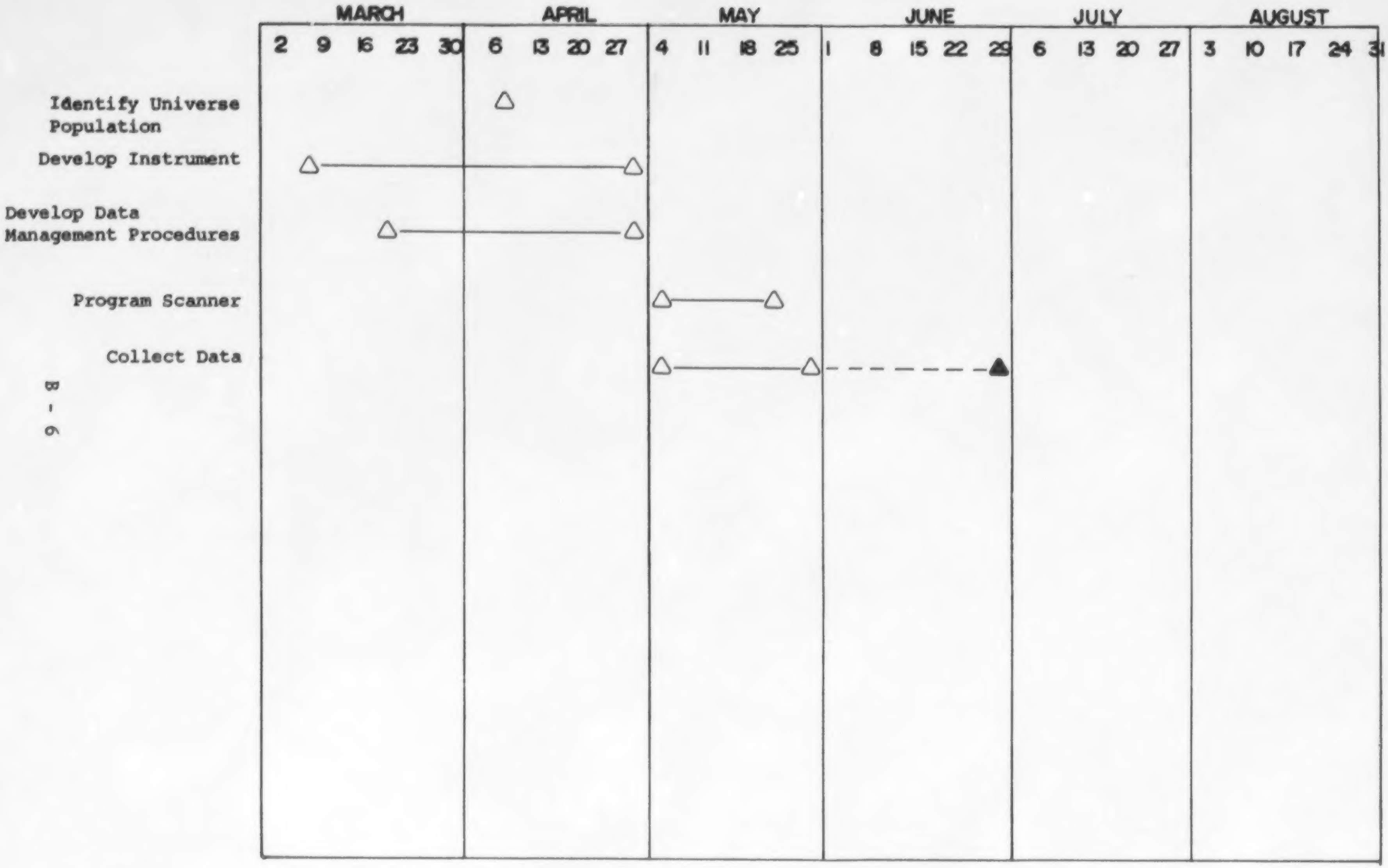
△-△ Scheduled period for task.
--- Possible extension if necessitated.
▲ Last possible date for completion.

POPULATION 4: STUDENTS ENROLLED IN CLUSTER PROGRAMS



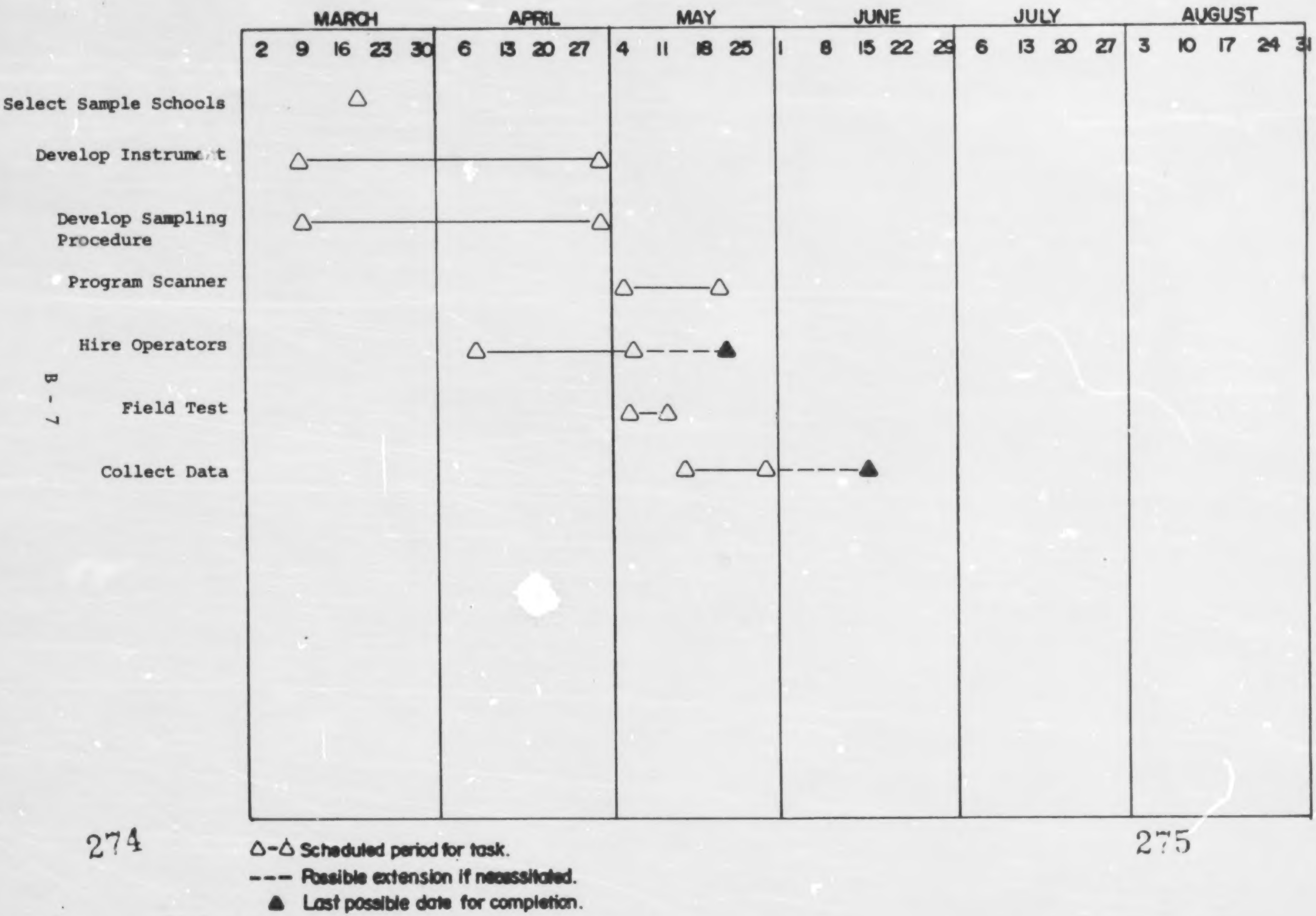
△-△ Scheduled period for task.
--- Possible extension if necessitated.
▲ Last possible date for completion.

POPULATION 5: STATE STAFF

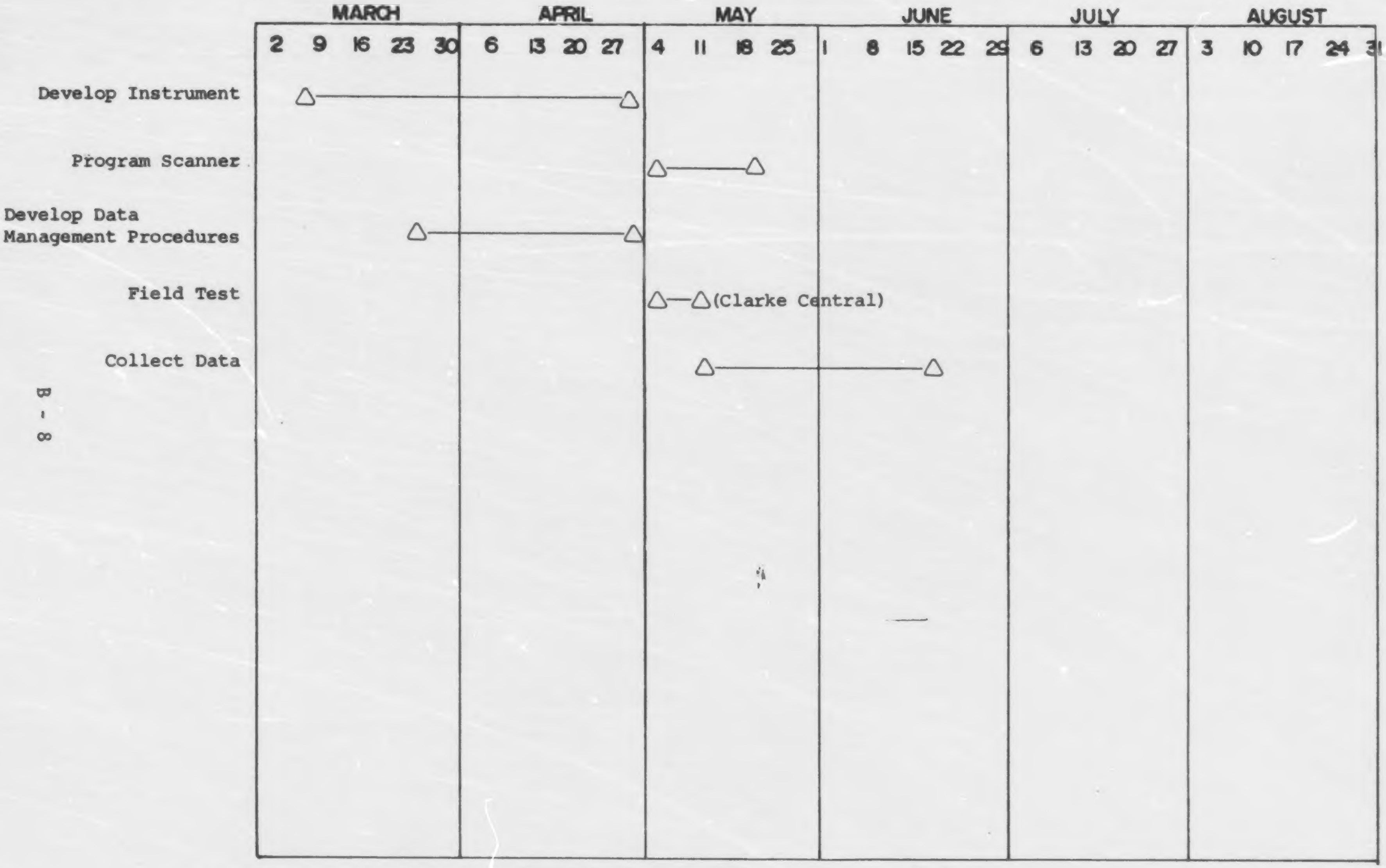


△-△ Scheduled period for task.
--- Possible extension if necessitated.
▲ Last possible date for completion.

POPULATION 6: LAY CITIZENS



POPULATION 7: PARENTS OF CURRENT CLUSTER STUDENTS

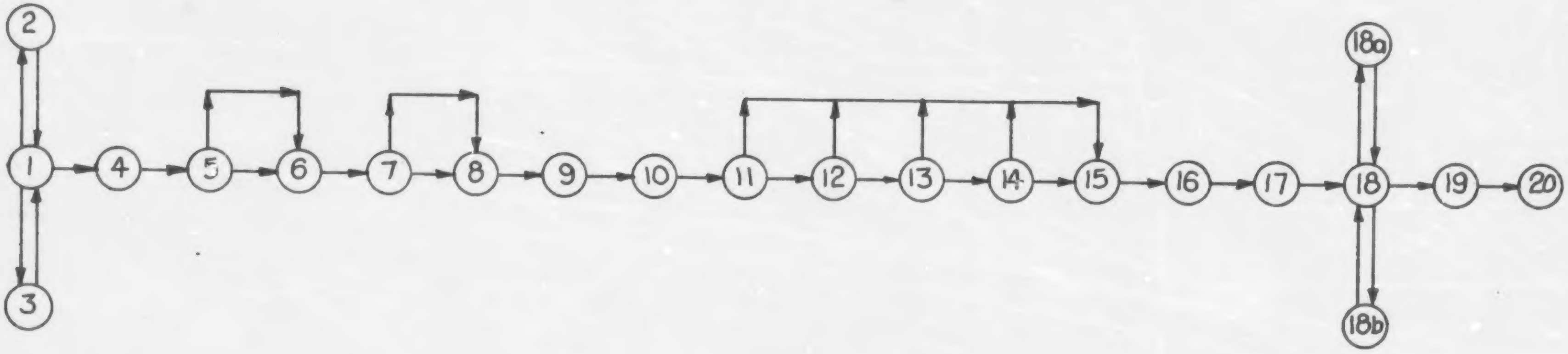


△-△ Scheduled period for task.

--- Possible extension if necessitated.

▲ Last possible date for completion.

FLOWCHART OF PROJECT ACTIVITIES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(Refer to Key on page B-10)

Key to: Flowchart for Accomplishing Objectives

1. Initial OVE Steering Committee/Staff Meeting--3/12/79.
2. Identify Eligible Comprehensive High Schools-- 3/12/79.
3. Identify Populations--3/12/ to 5/15/79.
4. Refine criteria for reports--3/1 to 3/19/79.
5. Refine research design--3/1 to 3/19/79.
6. Refine random sampling procedures--3/1 to 3/19/79.
7. Identify data to be collected--3/12 to 8/30/79.
8. Develop instruments--3/19 to 8/30/79.
9. Specify sample populations--3/19 to 8/1/79.
10. Develop data collection methods and procedures--3/19 to 8/15/79.
11. Field test data collection instruments/procedures--4/30 to 9/2/79.
12. Refine data collection instruments/procedures--5/15 to 9/2/79.
13. Develop data collection schedule--5/7 to 5/13/79.
14. Collect data--5/15 to 10/5/79.
15. Compile/analyze data--5/15 to 10/5/79.
16. Develop format for recommendations and conclusions--5/15 to 5/30/79.
17. Prepare reports--6/1 to 10/19/79.
18. Edit reports--6/1 to 10/19/79.
    a. Comprehensive final report
    b. Executive summary report
19. Print reports--10/19 to 11/1/79.
20. Submit reports--11/1/79.

Refer to: FLOWCHART FOR ACCOMPLISHING OBJECTIVES

Revised 3/7/79

CLUSTER EVALUATION - PROJECT CONTROL CHART

February , 1979 - November , 1979

Objective 1

Identify and refine the research design to be utilized.

SUBOBJECTIVES	TASK LISTING AND DETAILING	PROJECT PHASE	RESPONSIBILITY
1.1 Define type and scope of study	1.1 Specify descriptive research format. (See Project Proposal)	Planning	Proposal
	1.2 Specify subject areas to be probed. (See Project Proposal)	Planning	Proposal
	1.3 List populations to be measured. (See Project Proposal)	Planning	Proposal
	1.4 Specify data sources. (See Proposal)	Planning	Proposal
	1.5 Specify data collection techniques to be used. (See Proposal)	Planning	Proposal
	1.6 Specify analytic measures to be used. (See Proposal).	Planning	Proposal
	1.7 Prepare schematic of basic research design. (See Figure 1, Project Proposal)	Planning	Proposal
1.2 Develop project management and control procedures.	1.8 Assign staff.	Planning/ Implementation	O'Kelley
	1.9 Determine responsibilities	Planning	RFP/O'Kelley DVE Steering Committee
	1.10 Develop Project Control Chart	Planning	Connor

Objective 2

Develop model for study

SUBOBJECTIVES	TASK LISTING AND DETAILING	PROJECT PHASE	RESPONSIBILITY
	2.1 Identify major project events and phases (Page 29).	Planning	Proposal
	2.2 Develop event and activity schedule (Page 29)	Planning	Proposal
	2.3 Prepare Flowchart for accomplishing objectives	Planning	Proposal
	2.4 Develop schedule of SDE/Staff meetings (Page 32)	Planning	Proposal
	2.5 Develop Timeline/PERT Chart	Planning	Connor

Objective 3

Define population and random sampling procedures.

SUBOBJECTIVES	TASK LISTING AND DETAILING	PROJECT PHASE	RESPONSIBILITY
3.1 Define population of comprehensive high schools.	3.1 Compile list of eligible comprehensive high schools from SDE records.	Development	Steering Committee
	3.2 Decide on sampling procedure for selecting from among universe of schools.	Development	Steering Committee/ Project Staff
3.2 Define population of graduates from eligible schools for the years 1970-1976.	3.3 Develop list of approved clusters	Development	Steering Committee
	3.4 Develop list of cluster program graduates 1970-1976.	Development	Vocational Supervisors and school counselors
a. one year or more but less than two years in an occupational cluster.	a. Name of student b. Cluster involved in c. Length of time in cluster d. Graduation date e. Last known address f. Phone number		
b. two or more years in an occupational cluster	3.5 Develop a proportionate random sampling procedure to represent cluster distribution.	Development	Connor/Assigned State Staff
	3.6 Statify sample into geographic regions.	Development	Connor/Assigned State Staff
3.3 Define population of employers who employ two or more graduates from designated programs.	3.7 Compile lists identified from responses of graduates, vocational supervisors, counselors, and designated schools general advisory committees.	Developmental	Connor

SUBOBJECTIVES	TASK LISTING AND DETAILING	PROJECT PHASE	RESPONSIBILITY
3.4 Define population of vocational administrator now functioning in comprehensive high schools.	3.8 Divide vocational supervisors by (1) eligible designated schools, & (2) all others	Developmental	State Staff
3.5 Define population of students now enrolled in cluster programs in designated schools.	3.9 Generate list of cluster students in designated schools who have completed at least two consecutive quarters or more than one semester in an occupational cluster.	Developmental	MIS and Mr. Wiley Simpson
3.6 Define population of State Staff to be included	3.10 Generate list of entire office of Vocational Education Professional Staff.	Developmental	State Director, Voc. Ed.
3.7 Define sampling population of lay citizens.	3.11 Generate list of school districts to be sampled.	Developmental	Steering Committee
	3.12 Generate sample of citizens using random number techniques and telephone directories.	Developmental	Connor
3.8 Define population of parents of students now enrolled in cluster programs for at least two quarters or more than one semester in designated schools.	3.13 Generate list of parents from list of current students (see subobjective 3.5).	Developmental	Connor

Objective 4

Develop data collection instruments and procedures.

SUBOBJECTIVES	TASK LISTING AND DETAILING	PROJECT PHASE	RESPONSIBILITY
4.1 Prepare data collection instruments for each of seven populations.	4.1 Establish data categories for instruments.	Developmental	Connor/Staff
	4.2 Search for existing items that can be used.	"	"
	4.3 Form team of personnel to further develop and refine the pool of items.	"	"
	4.4 Organize items into instruments relevant to specific populations; coordinate with MIS.	"	"
	4.5 Verify each instrument as to utility, readability and comprehensiveness.	"	"
	4.6 Submit to Steering Committee for review and approval or revision.	"	"
4.2 Develop data collection procedures.	4.7 Develop logistics for collecting and recording data from each type of instrument for each population: Population 1 - Graduates of the cluster program a. mailed questionnaires b. written follow-ups c. telephone follow-ups Population 2 - Employers of graduates a. mailed questionnaires b. written follow-ups c. telephone follow-ups d. selected on-site visits and interviews	Developmental	Connor/Staff

SUBOBJECTIVES	TASK LISTING AND DETAILING	PROJECT PHASE	RESPONSIBILITY
	Population 3 - Vocational administrator a. mailed questionnaires b. written follow-ups c. telephone follow-ups Population 4 - Students enrolled in the cluster program a. mailed questionnaires b. written follow-ups c. telephone follow-ups d. on-site observation e. on-site interviews Population 5 - Staff staff a. mailed questionnaires Population 6 - Lay citizens a. telephone interviews Population 7 - Parents of students enrolled in cluster programs a. mailed questionnaires b. written follow-ups c. telephone follow-ups		

Objective 5

Design field test system

SUBOBJECTIVES	TASK LISTING AND DETAILING	PROJECT PHASE	RESPONSIBILITY
5.1 Identify field test sites	5.1 Obtain list of eligible comprehensive high schools from Steering Committee, select 6 for field test.	Field test	Connor/ Steering Committee
5.2 Identify population	5.2 Using the procedures specified in Objective 3, define seven populations from each of 6 schools selected.	Field test	Connor/Staff
5.3 Select samples	5.3 Select the field test sample from each population, from each school.	Field test	Connor/Staff
5.4 Initials data collection activities	5.4 Hire data collection staff as needed. Implement data collection procedures developed in Objective 4.	Field test	Connor
5.5 Collect field test data	5.5 Continue procedure in full operational mode using instruments and procedures developed in Objective 4.	Field test	Connor
5.6 Tabulate and analyze data	5.6 Using data categories specified in Objective 4, record and tabulate data.	Field test	Connor
5.7 Evaluate results	5.7 A. Identify dysfunctional procedures B. Identify dysfunctional instruments (or items within instruments) C. Identify procedure that are too times consuming to meet prior schedule. D. Identify procedure that are too expensive to meet budget requirements.	Field test	Connor/Staff

Objective 6

Modify design as required based on field test

SUBOBJECTIVES	TASK LISTING AND DETAILING	PROJECT PHASE	RESPONSIBILITY
6.1 Make any required adjustments in the research design.	Appropriate modification will be made to the field test system as warranted by results of the field test and input from the OVE Steering Committee.	Final Design	Connor/Staff/ Steering Committee
6.2 Correct faulty procedures and/or instruments.			
6.3 Correct items that fail to discriminate in any given instrument.			
6.4 Revise procedures that are incompatible with the project time lines or budget.			

Objective 7

Collect data required for study

SUBOBJECTIVES	TASK LISTING AND DETAILING	PROJECT PHASE	RESPONSIBILITY
7.1 Using addresses and phone numbers obtained from the participating schools, the project staff will initiate the mailout to the sample(s) of graduates.	Proceed according to approved procedures.	Data Collection	Connor
7.2 Mailout to the students currently enrolled.	"	"	"
7.3 Mailout to the vocational administrators.	"	"	"
7.4 Mailout to the State Staff of the Office of Vocational Education.	"	"	"
7.5 Follow-up of non-responding graduates, students, administrators, and state staff members.	"	"	"
7.6 Telephone interviews with lay people.	"	"	Staff
7.7 On-site visits to currently enrolled students.	"	"	Connor/Staff
7.8 Mailouts to parents of students currently enrolled.	"	"	"
7.9 Mailouts to employers.	"	"	"
7.10 Follow-up of parents and employers.	"	"	"
7.11 On-site interviews to selected employers.	"	"	"

Objective 8

Compile and analyze data

SUBOBJECTIVES	TASK LISTING AND DETAILING	PROJECT PHASE	RESPONSIBILITY
8.1 Transfer all data to appropriate data tabulation sheets.	8.1 Use procedures refined from field test.	Data Tabulation	Connor
8.2 Analyze data	8.2 a. produce frequencies by populations and by items. b. produce means, medians and modes by populations and by items. c. produce standard deviations by populations and items. d. further statistical analysis can be provided at the discretion of the Steering Committee.	Data Analysis	Connor
8.3 Develop data profiles	8.3 Develop charts, graphs, figures, etc.	Data Analysis	Connor

Objective 9

Synthesize findings

SUBOBJECTIVES	TASK LISTING AND DETAILING	PROJECT PHASE	RESPONSIBILITY
9.1 Establish data supported findings by populations.		Data Analysis	Connor/Staff
9.2 Coordinate data across populations to indicate specific findings and conclusions.		"	"
9.3 Draw conclusions from the data.		"	"
9.4 Establish recommendations based on the data.		"	"

Objective 10

Develop reporting format

SUBOBJECTIVES	TASK LISTING AND DETAILING	PROJECT PHASE	RESPONSIBILITY
10.1 Develop format for monthly reports.	10.1 a. will include the status toward reaching project objectives according to established time lines. b. standard USOE report outline will be followed. c. will be submitted the week following the end of the calendar month.	Developmental	Connor/Steering Committee
10.2 Develop format for comprehensive final report.	10.2 a. the comprehensive report will include the rationale, purpose, objectives, methodology, population, data collection instruments, statistical charts, findings, recommendations for improvements, bibliography and other information necessary for a scholarly document. b. the comprehensive final report document will be 8½" x 11" in size and 50 copies will be produced.	Developmental	Connor/Steering Committee
10.3 Develop format for executive summary report.	10.3 a. written in lay citizen terms. b. those data presented will be simplified for lay citizen interpretaion and supported by appropriate graphics. c. photographs and illustrations could be used to improve the utility and value of the report. d. the document will have a minimum of 20 pages, five by seven inches in size and 300 copies will be produced.	Developmental	Connor/Steering Committee

Objective 11

Prepare Reports

SUBOBJECTIVES	TASK LISTING AND DETAILING	PROJECT PHASE	RESPONSIBILITY
11.1 Month progress reports	11.1 a. number--10 copies b. size--8½" x 11" c. description--these reports will be prepared as a matter of routine. They will indicate the status toward reaching project objectives according to established timelines. Each report will be submitted the week following the end of the previous calendar month.	Reporting	Connor
11.2 Executive Summary Report	11.2 a. number--300 copies b. size--5" x 7"; minimum of 20 pages. c. description of content--this report will be developed from the comprehensive final report. It will be written in lay citizen terms; data presented will be simplified for lay citizens' interpretation and supported by appropriate graphics and photographs and illustrations could be used to improve the utility and value of the report. NOTE: A complete de-briefing session will be conducted between the project staff and OVE Steering Committee before the executive summary report is prepared.	Reporting	Connor/Staff Steering Committee
11.3 Comprehensive Final Report	11.3 a. number--50 copies b. size--8½"x11" c. description--this report will include a complete discussion of the project including: the rationale, purpose, objectives, activities, methodology, populations, data collection instruments (for each population), data collection procedures used, statistical charts, graphs, etc. findings, recommendations, and any other information necessary to present a "total" picture of the effectiveness of the cluster concept in Georgia.	Reporting	Connor/Staff

Objective 12

Evaluate Project

SUBOBJECTIVES	TASK LISTING AND DETAILING	PROJECT PHASE	RESPONSIBILITY
12.1 Review design of study		Evaluation	Third Party to be designed by Steering Committee
12.2 Critique instruments developed		"	"
12.3 Monitor field test		"	"
12.4 Monitor data collection procedures		"	"
12.5 React to data		"	"
12.6 Critique conclusions and recommendations		"	"
12.7 Analysis of project staffs' accomplishment of prestated objectives.		"	"
12.8 Prepare an evaluation report.		"	"

APPENDIX C

CLUSTER PROGRAM GRADUATE CENSUS

1776

STATE OF GEORGIA
DEPARTMENT OF EDUCATION
OFFICE OF VOCATIONAL EDUCATION
STATE OFFICE BUILDING
ATLANTA 30334

CHARLES McDANIEL
State Superintendent of Schools

JOSEPH G. FREUND
Associate State Superintendent

As you are aware a number of people at both the national and state levels have become interested in the overall effect of secondary Vocational Education and our programs here in Georgia have not gone unnoticed. The last state legislature mandated that a study be made of our cluster programs. In order to comply with their mandate, we here in the Office of Vocational Education have funded a special research project at The University of Georgia to study our cluster programs. However, the mandate from the General Assembly was not to The University of Georgia alone, but to all of us who are involved in secondary vocational education programs. This means that each selected school will need to provide whatever information and support that The University of Georgia project staff deems necessary to fulfill this obligation. These requests will have been reviewed by my office and shall not be any greater than necessary.

I was most pleased when your school was selected as one of the sample study sites. Although the selection occurred purely by chance, I believe it was most fortunate for the study and for vocational education. You have a personal history of dedication to the growth of and development of vocational education and of cooperation with the State Department in achieving the best possible programs for our students. This first part of the project will be difficult. However, I am confident that we can count on you. A letter from Dr. George L. O'Kelley will be sent along with my letter and will indicate what needs to be done. If you have specific questions, I suggest you call Dr. Paul Scott at (404) 542-4592. Thank you in advance for helping us and secondary vocational education out of a tight spot.

Respectfully,

Joseph Freund

Joseph G. Freund
Associate State Superintendent
Office of Vocational Education

1785

THE UNIVERSITY OF GEORGIA
COLLEGE OF EDUCATION
DIVISION OF VOCATIONAL EDUCATION
VOCATIONAL EDUCATION MATERIALS CENTER
GREEN STREET
ATHENS, GEORGIA 30602

AGRICULTURAL EDUCATION
BUSINESS AND OFFICE EDUCATION
DISTRIBUTIVE EDUCATION
HEALTH OCCUPATIONS EDUCATION
HOME ECONOMICS EDUCATION
INDUSTRIAL ARTS EDUCATION
TRADE AND INDUSTRIAL EDUCATION

VOCATIONAL EDUCATION MATERIALS CENTER

As the enclosed letter from Dr. Joe Freund's office indicates, an important study of secondary vocational cluster programs is under way in Georgia. It is our happy duty to inform you that your school has been selected as one of twenty schools to represent the cluster programs statewide in the study.

The first phase in the study is a census of selected cluster program graduates for the years 1970 through 1976. This census is to be completed by your school staff from student records and returned to the University of Georgia. The project has a tight schedule to meet, and we would be grateful if the completed census could be returned NO LATER THAN APRIL 16, 1979. A set of census forms and instructions is enclosed for those staff members who will complete the census.

This study was mandated by the Georgia State Legislature and is under the direct supervision of the State Department of Education. We at the University of Georgia are involved in the study because we realize that this is the most important event to occur in the programs since the implementation of the cluster concept. In view of the importance of the study to the future of vocational education in Georgia we are certain that you will give every effort to the timely and successful completion of the study.

Sincerely,

G. L. O'Kelley, Jr.; Chairman
Division of Vocational Education

GLO/cc

Enclosures

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION INSTITUTION

INSTRUCTIONS FOR COMPLETING THE CLUSTER PROGRAM GRADUATE CENSUS

The information for completing the Graduate Census is to be taken from your school's student record files. The recommended procedure is to divide the graduate records into years and assign one or more staff members or senior student assistants to each year.

1. Include only cluster program graduates from the graduating classes of 1970 through 1976. Omit any years for which you did not have a functioning cluster program.

2. Include only those graduates from the following five clusters:
   - (1) Electro-Mechanical
   - (2) Metal Fabrication
   - (3) Construction
   - (4) Transportation
   - (5) Health

3. Include only those graduates who completed one year or more in the same cluster. One year means at least three quarters or two semesters. This can be determined by counting from each student's record the number of quarters or semesters he/she completed in a cluster.

4. Record each student's name, last known address and telephone number, and how many years (1 or 2) he/she completed in the same cluster. 1 year = 2 to 3 semesters or 3 to 5 quarters. 2 years = 4 semesters or 6 quarters.

5. Use separate Census forms for each graduating class. Make any additional copies as necessary.

6. Enter your school and school system name, the name and telephone number of the person responsible for completing the census, and the graduating class year on each census form.

7. Return the completed census forms to:

   Cluster Study
   Vocational Education Materials Center
   University of Georgia
   Green Street
   Athens, GA 30602

   Use the enclosed stamped, self-addressed envelope. Return NO LATER THAN APRIL 16, 1979.

8. If there is any delay or any question about proper procedures, call collect (404) 542-4592 to Charles Connor.

THE UNIVERSITY OF GEORGIA
COLLEGE OF EDUCATION
DIVISION OF VOCATIONAL EDUCATION
VOCATIONAL EDUCATION MATERIALS CENTER
GREEN STREET
ATHENS, GEORGIA 30602

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HEALTH OCCUPATIONS EDUCATION
HOME ECONOMICS EDUCATION
INDUSTRIAL ARTS EDUCATION
TRADE AND INDUSTRIAL EDUCATION
VOCATIONAL EDUCATION MATERIALS CENTER

As the enclosed letter from Dr. Joe Freund's office indicates, an important study of secondary vocational cluster programs is under way in Georgia. It is our happy duty to inform you that your school has been selected as one of six schools to represent the cluster programs statewide in the field test portion of the study.

The first phase in the study is a census of selected cluster program graduates for the years 1970, 1973 and 1976. This census is to be completed by your school staff from student records and returned to the University of Georgia. The project has a tight schedule to meet, and we would be grateful if the completed census could be returned NO LATER THAN APRIL 16, 1979. A set of census forms and instructions is enclosed for those staff members who will complete the census.

This study was mandated by the Georgia State Legislature and is under the direct supervision of the State Department of Education. We at the University of Georgia are involved in the study because we realize that this is the most important event to occur in the programs since the implementation of the cluster concept. In view of the importance of the study to the future of vocational education in Georgia we are certain that you will give every effort to the timely and successful completion of the study.

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1. Include only cluster program graduates from the graduating classes of 1970, 1973 and 1976. Omit any year for which you did not have a functioning cluster program.

2. Include only those graduates from the following five clusters for each of the three years:
   - (1) Electro-Mechanical
   - (2) Metal Fabrication
   - (3) Construction
   - (4) Transportation
   - (5) Health

3. Include only those graduates who completed one year or more in the same cluster. One year means three quarters or two semesters. This can be determined by counting from each student's record the number of quarters or semesters he/she completed in a cluster.

4. From the first three eligible graduates located in your files randomly select one and record him/her on the Graduate Census form. Then select and record every third eligible graduate from your records.

5. Record each student's name, last known address and telephone number, and how many years (1 or 2) he/she completed in the same cluster. 1 year = 2 to 3 semesters or 3 to 5 quarters. 2 years = 4 semesters or 6 quarters.

6. Use separate Census forms for each graduating class. Make any additional copies as necessary.

7. Enter your school and school system name, the name and telephone number of the person responsible for completing the census, and the graduating class year on each census form.

8. Return the completed census forms to

   Cluster Study
   Vocational Education Materials Center
   University of Georgia
   Green Street
   Athens, GA 30602

   Use the enclosed stamped, self-addressed envelope. Return NO LATER THAN APRIL 16, 1979.

9. If there is any delay or any question about proper procedures, call collect (404) 542-4592 to Charles Connor.

CLUSTER PROGRAM GRADUATE CENSUS

List below students graduating in 1970-1976 who completed one year or more in one of the clusters listed. Enter a 1 or 2 in the cluster box to indicate the number of years in the cluster. 1 Year = 2 to 3 semesters or 3 to 5 quarters, 2 Years = 4 semesters or 6 quarters. Use separate sheets for each graduating class.

School Name ______________________ System ______________________

Your Name ______________________ Telephone ______________________

Graduating Class Year ☐

Student Name, Last Known Address, Telephone	Electro-Mechanical	Metals Fabrication	Construction	Transportation	Health

Student Name, Last Known Address, Telephone	Electro-Mechanical	Metals Fabrication	Construction	Transportation	Health

CLUSTER PROGRAM GRADUATE CENSUS

REGION I

1970-1974

School	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Cherokee High School	35	43	89	3	57	--	227
DeKalb Occ. Ed. Center	--	--	--	--	--	--	--
Forest Park High School	--	8	--	6	6	24	44
Haralson Co. High School	--	6	--	7	14	--	27
Henry Cnty. High School	4	20	9	20	13	--	66
Monroe Comp. High School	--	27	31	5	12	--	75
Paulding Co. Comp. H. S.	--	38	32	--	44	--	114
Rossville High School	--	--	--	--	--	--	--
Total	39	142	161	41	146	24	553

REGION I

1975-1976

School	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Cherokee High School	19	18	39	3	32	--	111
DeKalb Occ. Ed. Center	--	16	15	40	47	117	235
Forest Park High School	2	22	--	39	23	40	126
Haralson Co. High School	25	14	10	17	15	--	81
Henry Cnty. High School	--	10	15	29	23	--	77
Monroe Comp. High School	--	29	48	17	15	--	109
Paulding Co. Comp. H. S.	5	9	10	--	19	--	43
Rossville High School	8	15	9	10	23	20	85
Total	59	133	146	155	197	177	867

CLUSTER PROGRAM GRADUATE CENSUS

REGION II 1970-1974

School	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Cedar Shoals High School	--	--	3	2	16	--	21
North Hall High School	--	--	--	--	--	--	--
Stephens Co. High School	--	25	24	--	--	21	70
Washington Co. Career Cen.	67	3	32	54	63	77	296
White Co. Voc. H. S.	--	--	2	7	6	11	26
Total	67	28	61	63	85	109	413

REGION II 1975-1976

School	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Cedar Shoals High School	5	10	9	10	18	--	52
North Hall High School	9	19	--	9	18	30	85
Stephens Co. High School	--	41	10	--	--	14	65
Washington Co. Career Cen.	5	26	26	35	18	17	127
White Co. Voc. H. S.	3	9	15	31	24	22	104
Total	22	105	60	85	78	83	433

CLUSTER PROGRAM GRADUATE CENSUS

REGION III 1970-1974

School	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Appling County High School	--	--	3	1	5	16	25
Bacon County High School	--	--	5	--	--	1	6
Bradwell Institute	17	22	10	15	24	41	129
Total	17	22	18	16	29	58	160

REGION III 1975-1976

School	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Appling County High School	4	9	12	12	15	28	80
Bacon County High School	--	--	24	15	--	10	49
Bradwell Institute	43	24	24	14	25	22	152
Total	47	33	60	41	40	60	281

CLUSTER PROGRAM GRADUATE CENSUS

REGION IV

1970-1974

School	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Albany Vocational H. S.	--	74	35	14	25	17	165
Crisp County H. S.	--	23	15	--	29	--	67
Early County H. S.	12	--	25	45	--	--	82
Randolph County H. S.	--	--	--	15	31	16	62
Total	12	97	75	74	85	33	376

REGION IV

1975-1976

School	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Albany Vocational H. S.	--	42	47	14	54	38	195
Crisp County H. S.	1	15	9	--	30	--	55
Early County H. S.	11	--	--	86	--	--	97
Randolph County H. S.	1	--	--	38	34	43	116
Total	13	57	56	138	118	81	463

APPENDIX D

CLUSTER GRADUATE SAMPLING DISTRIBUTION

CLUSTER GRADUATE SAMPLE DISTRIBUTION BY SCHOOL

REGION I

1970-1974

School	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Cherokee High School	4	5	10	--	7	--	26
DeKalb Occ. Ed. Center	--	--	--	--	--	--	--
Forest Park High School	--	1	--	1	1	3	6
Haralson Co. High School	--	1	--	1	1	--	3
Henry County High School	1	2	1	2	2	--	8
Monroe Comp. High School	--	3	4	1	1	--	9
Paulding Co. Comp. H. S.	--	4	4	--	5	--	13
Rossville High School	--	--	--	--	--	--	--
	—	—	—	—	—	—	—
	5	16	19	5	17	3	65

REGION I

1975-1976

School	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Cherokee High School	2	2	5	--	4	--	13
DeKalb Occ. Ed. Center	--	2	2	5	5	13	27
Forest Park High School	--	3	--	5	3	5	16
Haralson Co. High School	3	2	1	2	2	--	10
Henry County High School	--	1	2	3	3	--	9
Monroe Comp. High School	--	3	6	2	2	--	13
Paulding Co. Comp. H. S.	1	1	1	--	2	--	5
Rossville High School	1	2	1	1	3	2	10
	—	—	—	—	—	—	—
	7	16	18	18	24	20	103

CLUSTER GRADUATE SAMPLE DISTRIBUTION BY SCHOOL

REGION II 1970-1974

School	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Cedar Shoals High School	--	--	--	--	2	--	2
North Hall High School	--	--	--	--	--	--	--
Stephens Co. H. S.	--	3	3	--	--	2	8
Washington Co. Career Cen.	8	--	4	6	7	9	34
White Co. Voc. H. S.	--	--	--	1	1	1	3
	8	3	7	7	10	12	47

REGION II 1975-1976

School	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Cedar Shoals High School	1	1	1	1	2	--	6
North Hall High School	1	2	--	2	2	3	10
Stephens Co. H. S.	--	5	1	--	--	2	8
Washington Co. Career Cen.	1	3	3	4	2	2	15
White Co. Voc. H. S.	--	1	2	4	3	3	13
	3	12	7	11	9	10	52

CLUSTER GRADUATE SAMPLE DISTRIBUTION BY SCHOOL

REGION III

1970-1974

School	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Appling Co. High School	--	--	--	--	1	2	3
Bacon Co. High School	--	--	1	--	--	--	1
Bradwell Institute	2	3	1	2	3	5	16
	2	3	2	2	4	7	20

1975-1976

School	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Appling Co. High School	1	1	1	1	2	3	9
Bacon Co. High School	--	--	3	2	--	1	6
Bradwell Institute	5	3	3	2	3	3	19
	6	4	7	5	5	7	34

CLUSTER GRADUATE SAMPLE DISTRIBUTION BY SCHOOL

REGION IV

1970-1974

School	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Albany Voc. High School	--	9	4	2	3	2	20
Crisp County High School	--	3	2	--	3	--	8
Early County High School	1	--	3	5	--	--	9
Randolph Co. High School	--	--	--	2	4	2	8
	—	—	—	—	—	—	—
	1	12	9	9	10	4	45

REGION IV

1975-1976

School	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Albany Voc. High School	--	5	5	2	6	4	22
Crisp County High School	--	2	1	--	3	--	6
Early County High School	1	--	--	10	--	--	11
Randolph Co. High School	--	--	--	4	4	5	13
	—	—	—	—	—	—	—
	1	7	6	16	13	9	52

APPENDIX E

CURRENT CLUSTER STUDENT SURVEY

Instructions for Administering the Survey to Cluster Students

1. Ask the teacher about attendance for the day and make a note of the number of absences.
2. In your introduction to the students be sure to stress that the study is being conducted by the State Department of Education, and that the University of Georgia was hired by the State Dept. to do the study.
3. Stress that the survey is not testing the students, but is asking the students to give us their opinion of the vocational courses.
4. Tell students that no one at their school, in their school system or in the State Department will see their answers.
5. If any student has already filled out the survey in another class, do not have him complete another one.
6. Make sure everyone has a pen or pencil.
7. Give out the envelopes (surveys). Be sure to give females an envelope marked F.
8. Have the students first take the parents' questionnaire and write the student's name on the line in the first paragraph. Then have the students mark which of the five vocational courses they are currently enrolled in. Then have the students return the parent questionnaire to the manila envelope.
9. Instruct the students to take the parent questionnaire home, have a parent or other guardian complete it, put in it the postage paid envelope and mail it to us tomorrow.
10. Proceed with the Current Student Survey form item by item. Read each item exactly as it is written and read the responses whenever the responses are more than two or three words each. Explain that you are reading the items so that everyone will hear the item exactly the same way.
11. On survey questions 10 and 11 stress that the student is to write in the number of quarters (or semesters) he/she has taken, including the present quarter (or semester).

    .On question 10 if a student is currently taking more than one of the courses listed, have him write in the number of quarters or semesters he has completed next to each of his present courses.

    .On question 11, have the student write in the number of quarters or semesters he has taken in any course that he is no longer enrolled in.

Instructions (CONTINUED)

.For example, if a student used to be in Graphic Arts but he switched to Transportation, in question 10 he would put the number of quarters he has taken in Transportation; and in question 11 he would put the number of quarters he took in Graphic Arts before he switched.

12. On question 22 tell the student to put anything that he thinks is really good or really bad about his high school vocational program.

13. When you finish all items take up the student questionnaires.

14. After you take up the student questionnaires remind the students to take the parent questionnaire home to have it completed. Mention that we will be calling or writing to those parents who do not return a survey form. (We can do this from the numbers on the questionnaires).

15. Thank the students, the teachers, and the vocational supervisor (and the principal if he was instrumental) for their help.

16. When the school personnel ask if they will get a report of the results of the survey, tell them that all results will be turned over to the State Department of Education, and that results should be requested from the Office of Vocational Education.

17. After leaving the school, write a summary describing the operation of the school's vocational program. Be particularly aware of questions and comments from teachers and supervisors about program operation and curriculum content. Try to pick up on teacher and student attitudes, conditions of the facilities, etc. Record particulars of everything significant you saw and heard.

Data Collection Procedures for the Cluster Study: Survey of Current Students

1. Call the Vocational Supervisor at your designated schools to arrange a date and time for the survey. A census of cluster graduates was conducted by the supervisors in April, so they know about the study.

   .Remind the supervisor that this is the cluster study that is being conducted by the State Department of Education.

   .Authorization for the study comes from the State Office of Vocational Education. All school superintendents, principals and vocational supervisors have been notified by Dr. Freund's office.

   .Make the appointment as soon as possible to avoid year-end activities, absences and exams.

   .You will be surveying current students in the five clusters:
      1. Electro Mechanical
      2. Transportation
      3. Construction
      4. Metal Fabrication
      5. Health

   .You will give the questionnaire to two classes in each cluster that is taught.

   .Choose the classes that have the most juniors and seniors.

   .Administration of the questionnaire will take about 20 minutes.

   .Ask to have the different clusters combined if possible so that all clusters being taught at the same time can be surveyed at the same time.

   .Tell the supervisor that the students will need something to write with (pen or pencil).

2. Immediately after arranging your appointments, fill out your travel requests.

3. Pick up your survey materials. They will be arranged in packages for each school.

4. When you get to the school, check in at the main office before going to the vocational section.

Data Collection Procedures for the Cluster Study:
Survey of Current Students (CONTINUED)

5. When you talk with the vocational supervisor and teachers you may encounter questions and rumors to the effect that the cluster program is in jeopardy. Exercise caution not to add to any apprehensions about the future of the cluster program. We have no information here that any decision is being made to change away from the cluster curriculum. We do not want to add fuel to any rumors.

6. Use the Instruction Sheet when administering the survey to the students.

CURRENT CLUSTER STUDENTS SURVEYED

Region: STATEWIDE	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Region I	16	101	148	187	204	121	777
Region II	34	97	76	103	101	65	476
Region III	15	32	64	52	43	66	272
Region IV	4	20	67	93	65	76	325
Total	69	250	355	435	413	328	1850
Percent	3.7%	13.5%	19.2%	23.5%	22.3%	17.7%	100%

CURRENT CLUSTER STUDENTS SURVEYED

Region I	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Cherokee High School	7	--	20	16	17	--	60
DeKalb Occ. Ed. Center	--	20	16	30	50	52	168
Forest Park High School	2	19	--	33	36	36	126
Haralson County High School	1	15	32	29	13	--	90
Henry County High School	--	26	27	25	36	24	138
Monroe Comp. High School	--	8	21	14	10	--	53
Paulding Co. Comp. H.S.	--	--	24	23	18	--	65
Rossville High School	6	13	8	17	24	9	77
	16	101	148	187	204	121	777

CURRENT CLUSTER STUDENTS SURVEYED

Region II	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Cedar Shoals High School	11	21	26	22	22	--	102
North Hall High School	1	20	--	25	24	16	86
Stephens County High School	12	26	27	26	20	19	130
Washington Co. Career Cntr.	4	30	--	18	16	--	68
White Cnty. Vocational H.S.	6	--	23	12	19	30	90
	34	97	76	103	101	65	476

CURRENT CLUSTER STUDENTS SURVEYED

Region III	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Appling County High School	8	3	--	7	5	10	33
Bacon County High School	2	--	29	--	--	14	45
Bradwell Institute	5	29	35	45	38	42	194
	15	32	64	52	43	66	272

CURRENT CLUSTER STUDENTS SURVEYED

Region IV	More than one cluster	Electro-Mechanical	Metal Fabrication	Construction	Transportation	Health	TOTAL
Albany Vocational High School	--	20	21	12	20	27	100
Crisp County High School	1	--	16	--	14	28	59
Early County High School	3	--	30	63	31	--	127
Randolph Cnty High School	--	--	--	18	--	21	39
	4	20	67	93	65	76	325

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Title IX -- Evelyn Rowe, Coordinator
Section 504 -- Jane Lee, Coordinator of Special Education
Vocational Equity -- Loydia Webber, Coordinator

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